Radiation Report

TPS7H4001-SP (TPS7H4001MDDWTSHP) Total Ionizing Dose (TID) Radiation Report

ABSTRACT

This report discusses the results of the total-ionizing dose (TID) testing for the Texas Instruments TPS7H4001-SP is a Radiation Hardness Assured, 7-V, 18-A, synchronous buck converter with integrated low-resistance, high-side and low-side MOSFETs in a thermally enhanced 44-pin Space Enhanced Plastic (Space EP) package.

The study was done to determine TID effects under l high dose rate (HDR) up to 100 krad(Si). The results show that all samples passed within the specified limits up to 100 krad(Si).

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Trademarks

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1 Device Information

1.1 Product Description

TPS7H4001-SHP is a radiation hardened , 7-V, 18-A, synchronous buck converter with integrated low-resistance, high-side and low-side MOSFETs in a thermally enhanced 44-pin Space EP package.

1.2 Device Details

Table 1-1 lists the device information used in the TID HDR characterization.

Table 1-1. Device and Exposure Details

TID HDR Details: 3, 10 , 30 , 50 and 100 krad(Si)	
Package	44-pin HTSSOP (DDW)
Quantity Tested	HDR: 5 biased and 5 unbiased units @ 3 krad(Si) levels 5 biased and 5 unbiased units @ 10 krad(Si) levels 5 biased and 5 unbiased units @ 30 krad(Si) levels 5 biased and 5 unbiased units @ 50 krad(Si) levels 22 biased and 5 unbiased units @ 100 krad(Si) levels
HDR Radiation Facility	CLAB, Texas Instruments, Dallas, Texas
HDR Dose Level	3 krad(Si), 10 krad(Si), 30 krad(Si), 50 krad(Si) 100 krad(Si)
HDR Dose Rate	200-250 rad(Si)/s ionizing radiation with increments
HDR Radiation Source	Gamma source At CLAB, Texas Instruments, Dallas, Texas
Irradiation and Test Temperature	Ambient, room temperature controlled to 24°C ±6°C per MIL-STD-883 and MIL-STD-750.

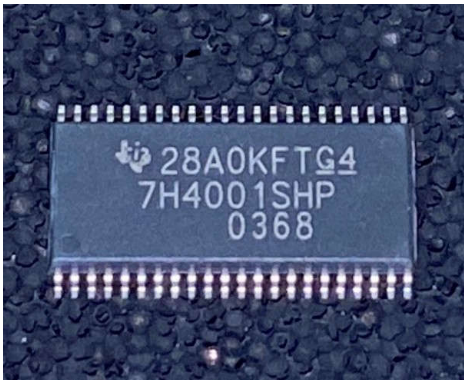


Figure 1-1. TPS7H4001-SHP Devices Used in Exposure

2 Total Dose Test Setup

2.1 Test Overview

The TPS7H4001-SHP was tested according to MIL-STD-883, Test Method 1019.9. For this testing, Conditions A and D were used. For this test, the product was irradiated up to the target radiation level, and then put through full electrical parametric testing on the production Automated Test Equipment (ATE). All devices remained functional passing all parametric test limits.

2.2 Test Description and Facilities

The TPS7H4001-SHP HDR exposure was performed on biased and unbiased devices at CLAB facility, Texas Instruments Dallas, Texas. The dose rate for exposure was between 220 -221 rad(Si)/s. After exposure, devices were electrically tested at Texas Instruments in Dallas, Texas.

2.3 Test Setup Details

The devices under HDR exposure was tested in two conditions, biased and unbiased, as described in the following sections.

2.3.1 Unbiased

For the unbiased HDR conditions, the exposure was performed with all pins grounded.

2.3.2 Biased

Figure 2-1 shows the diagram for HDR exposure with biased condition.

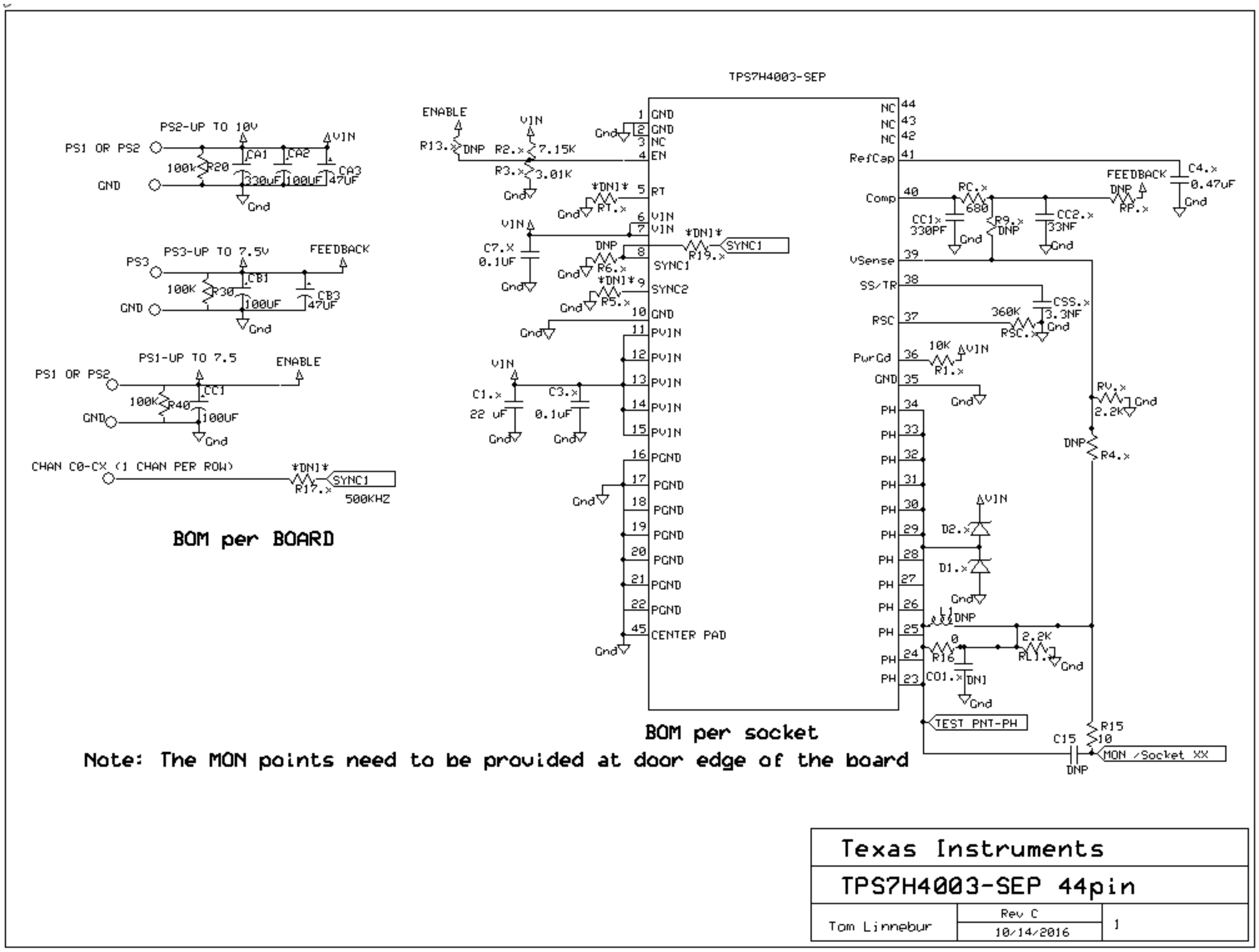


Figure 2-1. Bias Diagram Used in TID Exposure

2.4 Test Configuration and Condition

TPS7H4001-SHP HDR Units were stressed at 3 krad(Si) , 10 krad(Si), 30krad(Si), 30 krad(Si), 50 krad(Si) and 100 krad(Si) for biased and unbiased conditions.

Table 2-1. HDR ≥ 50–300 rad(Si)/s Biased Device Information (HDR)

Total samples: 42				
Exposure Levels:				
3 krad(Si) (5 samples)	10 krad(Si) (5 samples)	30 krad(Si) (5 samples)	50 krad(Si) (5 samples)	100 krad(Si) (22 samples)
#66, #67, #68, #69, #70	#56, #57, #58, #59, #60	#46, #47, #48, #49, #50	#36, #37, #38, #39, #40	#1- #6, #9 - #24

Table 2-2. HDR ≥ 50–300 rad(Si)/s Unbiased Device Information (HDR)

Total Samples: 25				
Exposure Levels:				
3 krad(Si) (5 samples)	10 krad(Si) (5 samples)	30 krad(Si) (5 samples)	50 krad(Si) (5 samples)	100 krad(Si) (5 samples)
#71, #72, #73, #74, #75	#61, #62, #63, #64, #65	#51, #52, #53, #54, #55	#41, #42, #43, #44, #45	#27, #28, #29, #30, #31

3 TID Characterization Test Results

3.1 TID Characterization Summary Results

The parametric data for the TPS7H4001-SHP passes up to 100-krad(Si) HDR TID. The drift of VID electrical parameters through HDR were within the pre-radiation limits.

Overall, the TPS7H4001-SHP showed a strong degree of hardness to HDR TID irradiation up to 100 krad(Si) for both biased and unbiased exposure conditions. The measurements taken post-irradiation for each sample set showed a marginal shift for most parameters at each dose level for both biased and unbiased. The parameters that did show a greater degree of change between pre- and post-irradiation were still within the data sheet electrical specifications (see Section 3.2 for Specification Compliance Matrix).

Please see Appendix A for HDR report up to 100 krad(Si).

3.2 Specification Compliance Matrix

The TPS7H4001-SHP Specification Compliance Matrix is comprised of electrical, timing, and switching characteristics lists as shown in the following tables.

Table 3-1. Electrical Characteristics - Section 1

PARAMETER	TEST CONDITIONS		MIN	TYP	MAX	UNIT	TEST#
SUPPLY VOLTAGE (VIN AND PVIN PINS)							
PVIN operating input voltage			3.0		7.0	V	
PVIN internal UVLO threshold	PVIN rising		2.425	2.50	2.575	V	23.0
PVIN internal UVLO hysteresis	Load = 0 A		425	450	475	mV	23.2
VIN operating input voltage			3.0		7.0	V	
VIN internal UVLO threshold	VIN rising		2.71	2.75	2.80	V	24.0
VIN internal UVLO hysteresis			134	150	178	mV	24.2
VIN shutdown supply current	VEN = 0 V			2.32	2.85	mA	4.1, 4.3
VIN operating – non switching supply current	VSENSE = VBG			4	6	mA	4.0, 4.2
ENABLE AND UVLO (EN PIN)							
Enable threshold	Rising		1.110	1.14	1.172	V	7.0, 7.6
	Falling		1.080	1.11	1.148		7.1, 7.7
Input current	VEN = 1.1 V		4.8	6.1	7.6	μ	7.3
Hysteresis current	VEN = 1.3 V		2.4	3.0	3.9	μ	7.5
VOLTAGE REFERENCE							
Internal voltage reference initial tolerance	0 A ≤ Iout ≤ 18 A, 25°C		0.598	0.605	0.613	V	3.8, 3.10
Internal voltage reference	0 A ≤ Iout ≤ 18 A	–55°C	0.594	0.602	0.609	V	3.8, 3.10
		+125°C	0.599	0.607	0.614		3.8, 3.10
REFCAP voltage	REFCAP = 470 nF		1.189	1.209	1.228	V	3.2, 3.3, 3.4
MOSFET							
High-side switch resistance[1]	PVIN = VIN = 3 V, lead	–55°C		16	18	mΩ	8.0
	length = 3 mm	25°C		19	21		8.0
		125°C		23	27		8.0
	PVIN = VIN = 5 V, lead length = 3 mm	–55°C		14	16		8.1
		25°C		17	19		8.1
		125°C		20	23		8.1
Low-side switch resistance[1]	PVIN = VIN = 3 V, lead	–55°C		7	11	mΩ	15.0
	length = 3 mm	25°C		9	12		1.0, 15.0
		125°C		13	17		15.0
	PVIN = VIN = 5 V, lead length = 3 mm	–55°C		6	10		15.1
		25°C		9	11		15.1
		125°C		12	15		15.1

(1) Measured at pins.

Table 3-2. Electrical Characteristics - Section 2

PARAMETER	TEST CONDITIONS		MIN	TYP	MAX	UNIT	TEST#
ERROR AMPLIFIER							
Error amplifier input offset voltage	VSENSE = 0.6 V		–2		2.55	mV	3.9,3.11
VSENSE pin input current	VSENSE = 0.6 V		–15		15	nA	3.5
Error amplifier transconductance (gm)	–2 µA < ICOMP < 2 µA, V(COMP) = 1 V		1150	1800	2400	µS	9.0,9.3
Error amplifier DC gain(1)	VSENSE = 0.6 V		10000			V/V	
Error amplifier source	V(COMP) = 1 V, 100-mV input overdrive		100	140	190	µA	9.2, 9.5
Error amplifier sink			100	140	190	µA	9.1, 9.4
INTERNAL SWITCHING FREQUENCY							
Internally set frequency	RT = Open	VIN = 3 V	444	473	515	kHz	21.1, 21.2
		VIN = 5 V	449	502	560		21.4, 21.5
Externally set frequency	RT = 1.07 MΩ (1%)	VIN = 3 V	80	98	125	kHz	5.0
		VIN = 5 V	80	100	125		11.0
	RT = 165 kΩ (1%)	VIN = 3 V	455	495	535		5.5
		VIN = 5 V	475	523	615		11.4
	RT = 73.2 kΩ (1%)	VIN = 3 V	689	850	1011		5.4
		VIN = 5 V	760	986	1212		11.2

(1) Specified by design only. Not tested in production.

Table 3-3. Electrical Characteristics - Section 3

PARAMETER	TEST CONDITIONS	MIN	TYP	MAX	UNIT	TEST#
EXTERNAL SYNCHRONIZATION						
SYNC1/SYNC2 out low-to-high rise time (10%/90%)	Cload = 25 pF		70	180	ns	13.8, 13.12
SYNC1/SYNC2 out high-to-low fall time (90%/10%)	Cload = 25 pF		10	21	ns	13.9, 13.13
SYNC2 to SYNC1 rising edge phase shift		77	85	94	°	21.0, 21.3
SYNC1 falling edge delay(1)		165	180	185	°	13.24, 13.25
SYNC1/SYNC2 out high level threshold	IOH = 50 µA	VIN – 0.3			V	13.18, 13.22
SYNC1/SYNC2 out low level threshold	IOL = 50 µA	600			mV	13.16, 13.20
SYNC1 in frequency range	PVIN = VIN = 5 V	100		1000	kHz	22.2
SYNC1 in duty cycle range	Duty cycle of external clock	40		60	%	22.4
PH (PH PIN)						
Minimum on time	Measured at 10% to 90% of VINIPH = 2 A, VIN = 5 V		190	235	ns	5.6
	Measured at 10% to 90% of VIN, IPH= 2 A, VIN = 5 V		190	225		11.6
SOFT START AND TRACKING (SS/TR PIN)						
SS charge current		1.5	2.5	3	µA	9.6, 9.7
POWER GOOD (PWRGD PIN)						
VSENSE threshold	VSENSE falling (fault)	90	91		%VREF	12.0, 12.6
	VSENSE rising (good)		94	97		12.1, 12.7
	VSENSE rising (fault)		109	111		12.2, 12.8
	VSENSE falling (good)	103	106			12.3, 12.9
Output high leakage	VSENSE = VREF, V(PWRGD) = 5 V		30	181	nA	12.4, 12.10
Output low	I(PWRGD) = 2 mA	0.3			V	12.5, 12.11

(1) Bench verified. Not tested in production.

4 Applicable and Reference Documents

4.1 Applicable Documents

- *TPS7H4001-SP Radiation-Hardness-Assured 3-V to 7-V Input 18-A Synchronous Buck Converter*

4.2 Reference Documents

Texas Instruments total ionizing dose radiation (total dose) test procedure follows the standards put forth in MIL-STD-883 TM 1019. The document can be found at the DLA website.

5 Revision History

Changes from Revision * (November 2022) to Revision A (May 2023)	Page
• Added TID unbiased and biased HDR report data	12

A Appendix: HDR TID Report

This appendix contains the HDR TID report data.

TID/HDR Biased Report

Die lot: 1087518
Exposure date: 11/15/2022
Assy Lot: 2517212

TPS7H4001-SHP

TID/HDR Biased Report

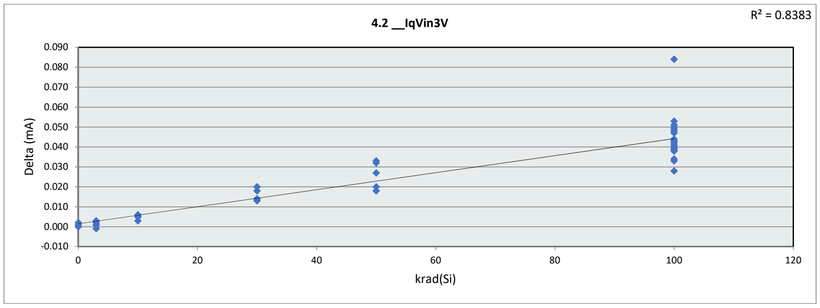
Die lot: 1087518

Exposure date: 11/15/2022

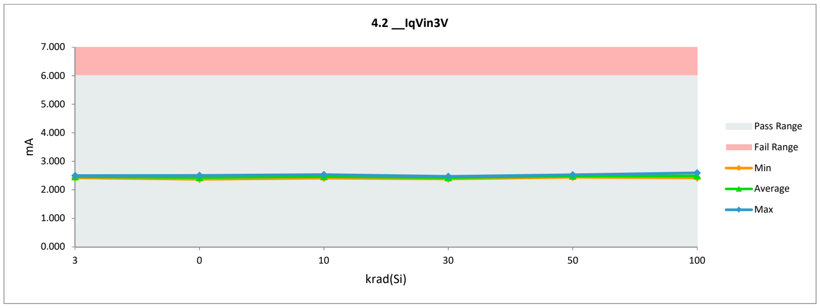
Assy Lot: 2517212

TPS7H4001-SHP

		4.2 __IqVin3V		
	Test Site	Junkins Lab- Dalla	Junkins Lab- Dallas	
	Tester	ETS364/FETS3641	ETS364/FETS36412	
	Test Number	EB588003	EB588003	
	Unit	mA	mA	
	Max Limit	6	6	
	Min Limit	0	0	
krad(Si)	Serial #	Pre Biased	Post Biased	Delta
100	1	2.445	2.483	0.038
100	2	2.507	2.549	0.042
100	3	2.465	2.498	0.033
100	4	2.449	2.533	0.084
100	5	2.419	2.453	0.034
100	6	2.413	2.466	0.053
100	9	2.405	2.433	0.028
100	10	2.549	2.596	0.047
100	11	2.417	2.457	0.040
100	12	2.381	2.420	0.039
100	13	2.494	2.535	0.041
100	14	2.460	2.498	0.038
100	15	2.403	2.442	0.039
100	16	2.441	2.485	0.044
100	17	2.466	2.516	0.050
100	18	2.385	2.428	0.043
100	19	2.407	2.456	0.049
100	20	2.444	2.492	0.048
100	21	2.426	2.466	0.040
100	22	2.416	2.459	0.043
100	23	2.488	2.527	0.039
100	24	2.492	2.543	0.051
50	36	2.500	2.527	0.027
50	37	2.422	2.440	0.018
50	38	2.437	2.470	0.033
50	39	2.483	2.515	0.032
50	40	2.444	2.464	0.020
30	46	2.367	2.385	0.018
30	47	2.426	2.439	0.013
30	48	2.456	2.470	0.014
30	49	2.442	2.462	0.020
30	50	2.367	2.381	0.014
10	56	2.456	2.461	0.005
10	57	2.469	2.474	0.005
10	58	2.528	2.531	0.003
10	59	2.435	2.440	0.005
10	60	2.405	2.411	0.006
3	66	2.478	2.477	-0.001
3	67	2.498	2.499	0.001
3	68	2.464	2.467	0.003
3	69	2.420	2.422	0.002
3	70	2.434	2.435	0.001
0	33	2.370	2.372	0.002
0	34	2.504	2.505	0.001
0	35	2.417	2.417	0.000
	Max	2.549	2.596	0.084
	Average	2.444	2.471	0.027
	Min	2.367	2.372	-0.001
	Std Dev	0.043	0.047	0.020



	4.2 __IqVin3V					
Test Site	unkins Lab- Dallas					
Tester	TS364/FETS36412					
Test Number	EB588003					
Max Limit	6	mA				
Min Limit	0	mA				
krad(Si)	3	0	10	30	50	100
LL	0.000	0.000	0.000	0.000	0.000	0.000
Min	2.422	2.372	2.411	2.381	2.440	2.420
Average	2.460	2.431	2.463	2.427	2.483	2.488
Max	2.499	2.505	2.531	2.470	2.527	2.596
UL	6.000	6.000	6.000	6.000	6.000	6.000



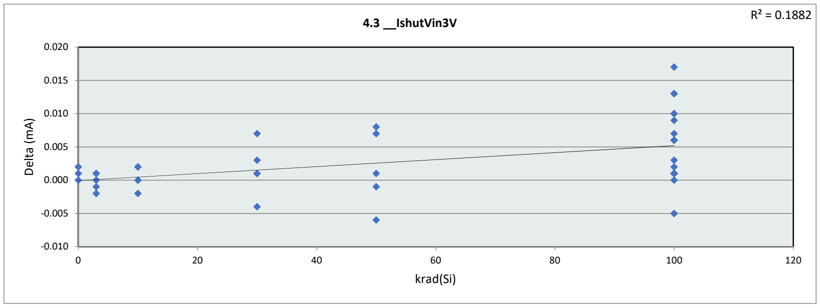
TID/HDR Biased Report

Die lot: 1087518 Exposure date: 11/15/2022

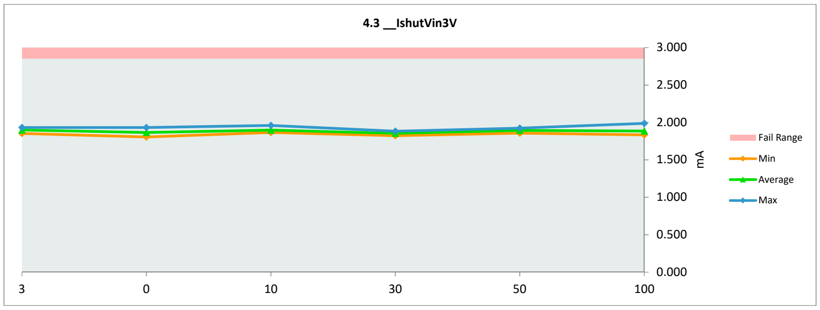
Assy Lot: 2517212

TPS7H4001-SHP

		4.3 __IshutVin3V		
	Test Site	Junkins Lab- Dallas	Junkins Lab- Dallas	
	Tester	ETS364/FETS36412	ETS364/FETS36412	
	Test Number	EB588003	EB588003	
	Unit	mA	mA	
	Max Limit	2.85	2.85	
	Min Limit			
krad(Si)	Serial #	Pre Biased	Post Biased	Delta
100	1	1.866	1.866	0.000
100	2	1.927	1.937	0.010
100	3	1.893	1.888	-0.005
100	4	1.880	1.881	0.001
100	5	1.847	1.848	0.001
100	6	1.850	1.867	0.017
100	9	1.859	1.854	-0.005
100	10	1.974	1.987	0.013
100	11	1.867	1.868	0.001
100	12	1.831	1.833	0.002
100	13	1.932	1.938	0.006
100	14	1.888	1.891	0.003
100	15	1.851	1.852	0.001
100	16	1.871	1.877	0.006
100	17	1.893	1.902	0.009
100	18	1.839	1.845	0.006
100	19	1.845	1.858	0.013
100	20	1.873	1.886	0.013
100	21	1.867	1.868	0.001
100	22	1.867	1.877	0.010
100	23	1.917	1.923	0.006
100	24	1.920	1.927	0.007
50	36	1.922	1.923	0.001
50	37	1.862	1.856	-0.006
50	38	1.870	1.877	0.007
50	39	1.912	1.920	0.008
50	40	1.892	1.891	-0.001
30	46	1.819	1.822	0.003
30	47	1.864	1.865	0.001
30	48	1.875	1.876	0.001
30	49	1.876	1.883	0.007
30	50	1.827	1.823	-0.004
10	56	1.890	1.890	0.000
10	57	1.896	1.894	-0.002
10	58	1.958	1.960	0.002
10	59	1.874	1.876	0.002
10	60	1.866	1.866	0.000
3	66	1.920	1.918	-0.002
3	67	1.932	1.931	-0.001
3	68	1.902	1.903	0.001
3	69	1.852	1.853	0.001
3	70	1.887	1.887	0.000
0	33	1.806	1.806	0.000
0	34	1.929	1.931	0.002
0	35	1.857	1.858	0.001
	Max	1.974	1.987	0.017
	Average	1.881	1.884	0.003
	Min	1.806	1.806	-0.006
	Std Dev	0.036	0.037	0.005



	4.3 __IshutVin3V					
Test Site	unkins Lab- Dallas					
Tester	TS364/FETS36412					
Test Number	EB588003					
Max Limit	2.85	mA				
Min Limit		mA				
krad(Si)	3	0	10	30	50	100
LL						
Min	1.853	1.806	1.866	1.822	1.856	1.833
Average	1.898	1.865	1.897	1.854	1.893	1.885
Max	1.931	1.931	1.960	1.883	1.923	1.987
UL	2.850	2.850	2.850	2.850	2.850	2.850



TID/HDR Biased Report

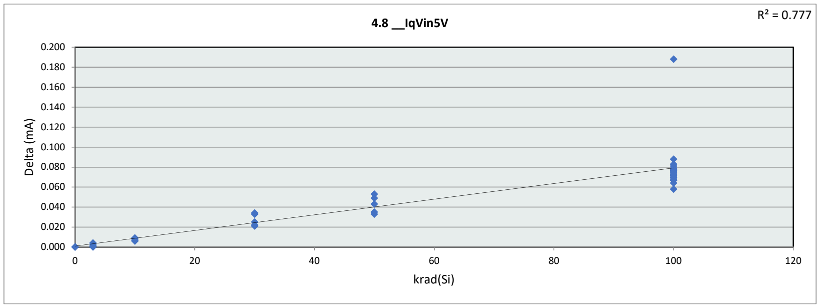
Die lot: 1087518

Exposure date: 11/15/2022

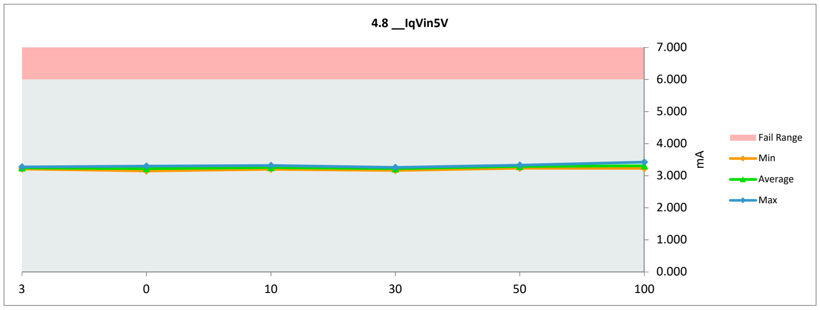
Assy Lot: 2517212

TPS7H4001-SHP

		4.8 __IqVin5V		
	Test Site	Junkins Lab- Dalla	Junkins Lab- Dallas	
	Tester	ETS364/FETS3641	ETS364/FETS36412	
	Test Number	EB588003	EB588003	
	Unit	mA	mA	
	Max Limit	6	6	
	Min Limit			
krad(Si)	Serial #	Pre Biased	Post Biased	Delta
100	1	3.226	3.298	0.072
100	2	3.298	3.374	0.076
100	3	3.245	3.312	0.067
100	4	3.234	3.422	0.188
100	5	3.195	3.259	0.064
100	6	3.199	3.282	0.083
100	9	3.182	3.240	0.058
100	10	3.338	3.419	0.081
100	11	3.194	3.268	0.074
100	12	3.162	3.230	0.068
100	13	3.294	3.369	0.075
100	14	3.249	3.316	0.067
100	15	3.192	3.268	0.076
100	16	3.224	3.303	0.079
100	17	3.269	3.346	0.077
100	18	3.163	3.235	0.072
100	19	3.194	3.272	0.078
100	20	3.246	3.323	0.077
100	21	3.233	3.303	0.070
100	22	3.196	3.268	0.072
100	23	3.271	3.341	0.070
100	24	3.276	3.364	0.088
50	36	3.275	3.318	0.043
50	37	3.202	3.235	0.033
50	38	3.232	3.285	0.053
50	39	3.280	3.329	0.049
50	40	3.238	3.273	0.035
30	46	3.145	3.178	0.033
30	47	3.215	3.236	0.021
30	48	3.235	3.260	0.025
30	49	3.207	3.241	0.034
30	50	3.143	3.165	0.022
10	56	3.240	3.247	0.007
10	57	3.271	3.278	0.007
10	58	3.311	3.317	0.006
10	59	3.210	3.219	0.009
10	60	3.191	3.200	0.009
3	66	3.269	3.269	0.000
3	67	3.275	3.276	0.001
3	68	3.255	3.259	0.004
3	69	3.208	3.211	0.003
3	70	3.207	3.208	0.001
0	33	3.150	3.150	0.000
0	34	3.299	3.299	0.000
0	35	3.209	3.209	0.000
	Max	3.338	3.422	0.188
	Average	3.230	3.277	0.047
	Min	3.143	3.150	0.000
	Std Dev	0.046	0.061	0.038



	4.8 __IqVin5V					
Test Site	unkins Lab- Dallas					
Tester	TS364/FETS36412					
Test Number	EB588003					
Max Limit	6	mA				
Min Limit		mA				
krad(Si)	3	0	10	30	50	100
LL						
Min	3.208	3.150	3.200	3.165	3.235	3.230
Average	3.245	3.219	3.252	3.216	3.288	3.310
Max	3.276	3.299	3.317	3.260	3.329	3.422
UL	6.000	6.000	6.000	6.000	6.000	6.000



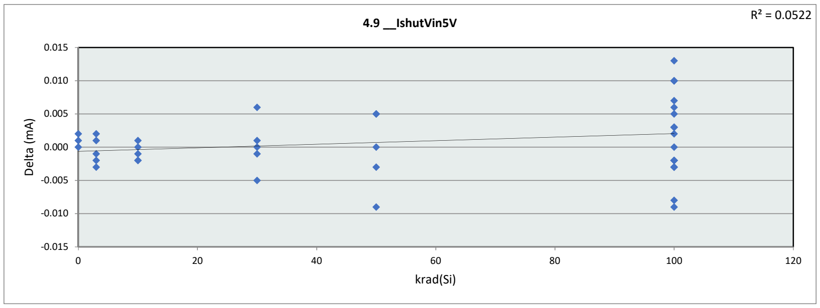
TID/HDR Biased Report

Die lot: 1087518 Exposure date: 11/15/2022

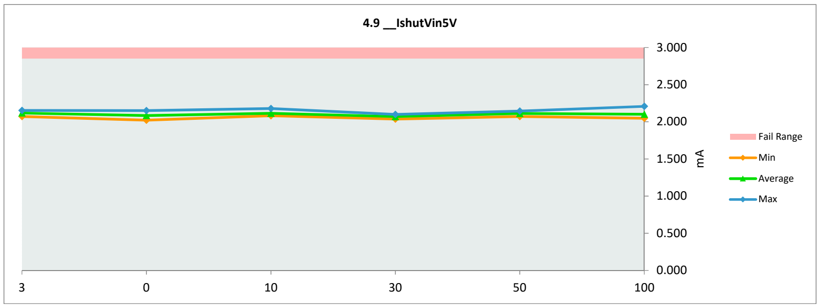
Assy Lot: 2517212

TPS7H4001-SHP

		4.9 __IshutVin5V		
	Test Site	Junkins Lab- Dalla	Junkins Lab- Dallas	
	Tester	ETS364/FETS3641	ETS364/FETS36412	
	Test Number	EB588003	EB588003	
	Unit	mA	mA	
	Max Limit	2.85	2.85	
	Min Limit			
krad(Si)	Serial #	Pre Biased	Post Biased	Delta
100	1	2.086	2.084	-0.002
100	2	2.146	2.152	0.006
100	3	2.114	2.106	-0.008
100	4	2.096	2.094	-0.002
100	5	2.063	2.060	-0.003
100	6	2.068	2.081	0.013
100	9	2.077	2.068	-0.009
100	10	2.198	2.208	0.010
100	11	2.080	2.077	-0.003
100	12	2.050	2.048	-0.002
100	13	2.156	2.158	0.002
100	14	2.105	2.105	0.000
100	15	2.069	2.066	-0.003
100	16	2.090	2.093	0.003
100	17	2.114	2.119	0.005
100	18	2.056	2.059	0.003
100	19	2.063	2.073	0.010
100	20	2.093	2.103	0.010
100	21	2.085	2.083	-0.002
100	22	2.082	2.089	0.007
100	23	2.137	2.140	0.003
100	24	2.135	2.145	0.010
50	36	2.145	2.145	0.000
50	37	2.080	2.071	-0.009
50	38	2.090	2.095	0.005
50	39	2.129	2.134	0.005
50	40	2.114	2.111	-0.003
30	46	2.036	2.037	0.001
30	47	2.082	2.081	-0.001
30	48	2.094	2.094	0.000
30	49	2.093	2.099	0.006
30	50	2.045	2.040	-0.005
10	56	2.109	2.108	-0.001
10	57	2.116	2.114	-0.002
10	58	2.179	2.180	0.001
10	59	2.091	2.091	0.000
10	60	2.084	2.082	-0.002
3	66	2.142	2.139	-0.003
3	67	2.155	2.154	-0.001
3	68	2.116	2.118	0.002
3	69	2.070	2.071	0.001
3	70	2.109	2.107	-0.002
0	33	2.022	2.022	0.000
0	34	2.150	2.152	0.002
0	35	2.077	2.078	0.001
	Max	2.198	2.208	0.013
	Average	2.100	2.101	0.001
	Min	2.022	2.022	-0.009
	Std Dev	0.038	0.039	0.005



	4.9 __IshutVin5V					
Test Site	unkins Lab- Dallas					
Tester	TS364/FETS36412					
Test Number	EB588003					
Max Limit	2.85	mA				
Min Limit		mA				
krad(Si)	3	0	10	30	50	100
LL						
Min	2.071	2.022	2.082	2.037	2.071	2.048
Average	2.118	2.084	2.115	2.070	2.111	2.101
Max	2.154	2.152	2.180	2.099	2.145	2.208
UL	2.850	2.850	2.850	2.850	2.850	2.850



TID/HDR Biased Report

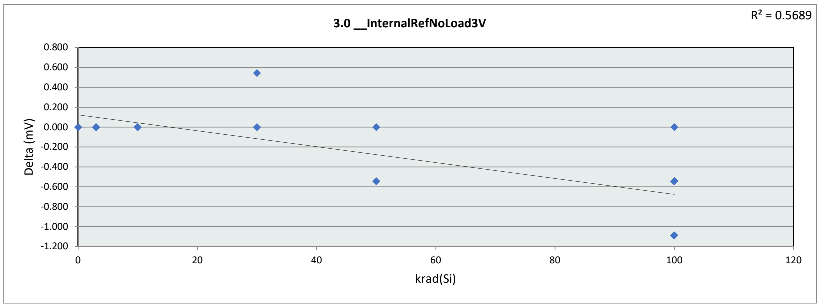
Die lot: 1087518 Exposure date: 11/15/2022

Assy Lot: 2517212

TPS7H4001-SHP

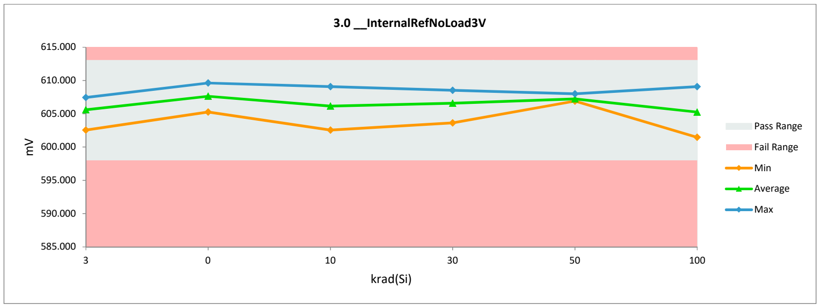
	3.0 __InternalRefNoLoad3V	
Test Site	Junkins Lab- Dalla	Junkins Lab- Dallas
Tester	ETS364/FETS3641	ETS364/FETS36412
Test Number	EB588003	EB588003
Unit	mV	mV
Max Limit	613	613
Min Limit	598	598

krad(Si)	Serial #	Pre Biased	Post Biased	Delta
100	1	604.728	603.640	-1.088
100	2	607.991	606.903	-1.088
100	3	605.815	605.271	-0.544
100	4	605.271	604.728	-0.543
100	5	606.903	606.903	0.000
100	6	604.728	604.184	-0.544
100	9	607.991	607.447	-0.544
100	10	603.640	603.096	-0.544
100	11	606.903	605.815	-1.088
100	12	606.903	606.359	-0.544
100	13	604.728	603.640	-1.088
100	14	605.271	604.728	-0.543
100	15	605.815	605.271	-0.544
100	16	606.359	605.271	-1.088
100	17	605.815	605.271	-0.544
100	18	602.009	601.465	-0.544
100	19	606.903	605.815	-1.088
100	20	609.078	608.534	-0.544
100	21	603.640	602.552	-1.088
100	22	605.815	604.728	-1.087
100	23	605.271	604.728	-0.543
100	24	609.078	609.078	0.000
50	36	607.447	607.447	0.000
50	37	607.447	606.903	-0.544
50	38	607.447	606.903	-0.544
50	39	607.991	607.991	0.000
50	40	607.447	606.903	-0.544
30	46	606.359	606.359	0.000
30	47	606.903	606.903	0.000
30	48	607.991	608.534	0.543
30	49	607.447	607.447	0.000
30	50	603.096	603.640	0.544
10	56	602.552	602.552	0.000
10	57	609.078	609.078	0.000
10	58	607.447	607.447	0.000
10	59	608.534	608.534	0.000
10	60	603.096	603.096	0.000
3	66	606.903	606.903	0.000
3	67	605.815	605.815	0.000
3	68	605.271	605.271	0.000
3	69	607.447	607.447	0.000
3	70	602.552	602.552	0.000
0	33	607.991	607.991	0.000
0	34	609.622	609.622	0.000
0	35	605.271	605.271	0.000
	Max	609.622	609.622	0.544
	Average	606.262	605.912	-0.351
	Min	602.009	601.465	-1.088
	Std Dev	1.906	2.013	0.451



	3.0 __InternalRefNoLoad3V	
Test Site	unkins Lab- Dallas	
Tester	TS364/FETS36412	
Test Number	EB588003	
Max Limit	613	mV
Min Limit	598	mV

krad(Si)	3	0	10	30	50	100
LL	598.000	598.000	598.000	598.000	598.000	598.000
Min	602.552	605.271	602.552	603.640	606.903	601.465
Average	605.598	607.628	606.141	606.577	607.229	605.247
Max	607.447	609.622	609.078	608.534	607.991	609.078
UL	613.000	613.000	613.000	613.000	613.000	613.000



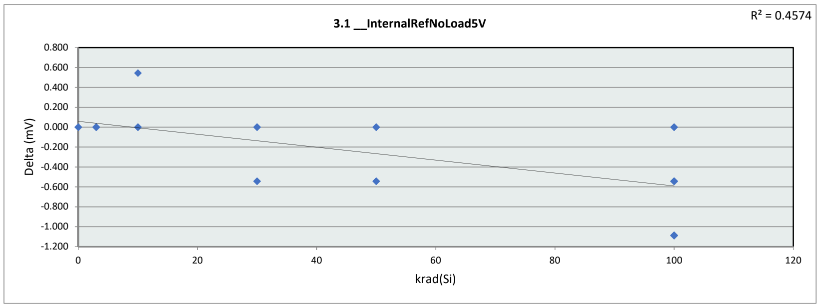
TID/HDR Biased Report

Die lot: 1087518 Exposure date: 11/15/2022

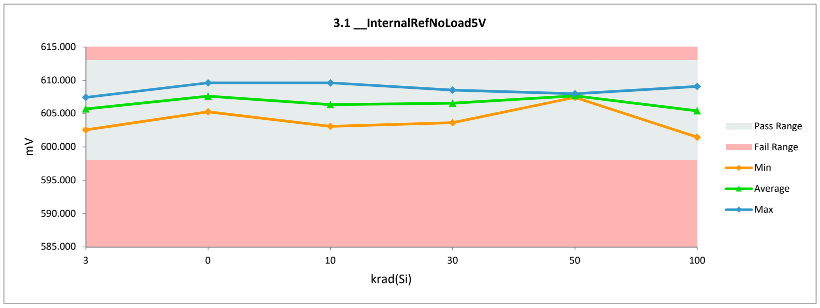
Assy Lot: 2517212

TPS7H4001-SHP

		3.1 __InternalRefNoLoad5V		
	Test Site	Junkins Lab- Dalla	Junkins Lab- Dallas	
	Tester	ETS364/FETS3641	ETS364/FETS36412	
	Test Number	EB588003	EB588003	
	Unit	mV	mV	
	Max Limit	613	613	
	Min Limit	598	598	
krad(Si)	Serial #	Pre Biased	Post Biased	Delta
100	1	604.728	604.184	-0.544
100	2	607.991	606.903	-1.088
100	3	605.815	605.815	0.000
100	4	605.271	604.728	-0.543
100	5	607.447	606.903	-0.544
100	6	604.728	604.184	-0.544
100	9	607.991	607.447	-0.544
100	10	604.184	603.096	-1.088
100	11	606.903	605.815	-1.088
100	12	606.903	606.359	-0.544
100	13	604.728	604.184	-0.544
100	14	605.271	605.271	0.000
100	15	605.815	605.815	0.000
100	16	606.359	605.271	-1.088
100	17	605.815	605.271	-0.544
100	18	602.552	601.465	-1.087
100	19	606.903	605.815	-1.088
100	20	609.078	608.534	-0.544
100	21	603.640	603.096	-0.544
100	22	605.815	605.271	-0.544
100	23	605.271	604.728	-0.543
100	24	609.078	609.078	0.000
50	36	607.991	607.991	0.000
50	37	607.991	607.447	-0.544
50	38	607.447	607.447	0.000
50	39	607.991	607.991	0.000
50	40	607.991	607.447	-0.544
30	46	606.903	606.359	-0.544
30	47	606.903	606.903	0.000
30	48	608.534	608.534	0.000
30	49	607.991	607.447	-0.544
30	50	603.640	603.640	0.000
10	56	603.096	603.096	0.000
10	57	609.078	609.622	0.544
10	58	607.447	607.447	0.000
10	59	608.534	608.534	0.000
10	60	603.096	603.096	0.000
3	66	606.903	606.903	0.000
3	67	606.359	606.359	0.000
3	68	605.271	605.271	0.000
3	69	607.447	607.447	0.000
3	70	602.552	602.552	0.000
0	33	607.991	607.991	0.000
0	34	609.622	609.622	0.000
0	35	605.271	605.271	0.000
	Max	609.622	609.622	0.544
	Average	606.407	606.081	-0.326
	Min	602.552	601.465	-1.088
	Std Dev	1.876	1.983	0.408



	3.1 __InternalRefNoLoad5V					
Test Site	unkins Lab- Dallas					
Tester	TS364/FETS36412					
Test Number	EB588003					
Max Limit	613	mV				
Min Limit	598	mV				
krad(Si)	3	0	10	30	50	100
LL	598.000	598.000	598.000	598.000	598.000	598.000
Min	602.552	605.271	603.096	603.640	607.447	601.465
Average	605.706	607.628	606.359	606.577	607.665	605.420
Max	607.447	609.622	609.622	608.534	607.991	609.078
UL	613.000	613.000	613.000	613.000	613.000	613.000



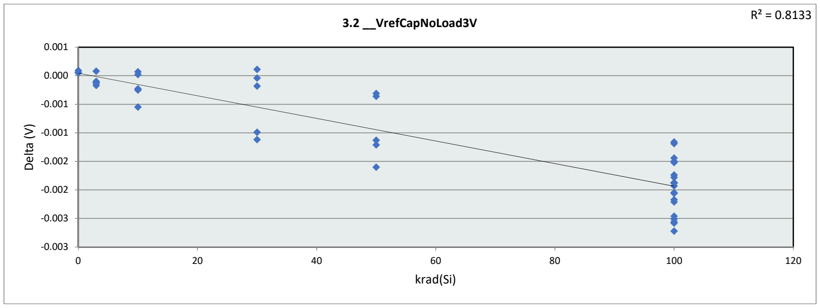
TID/HDR Biased Report

Die lot: 1087518 Exposure date: 11/15/2022

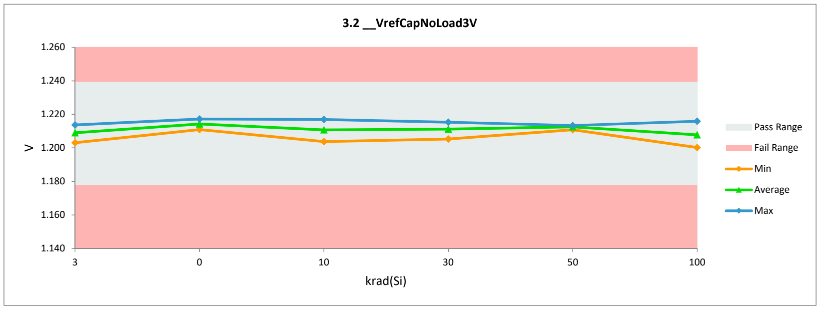
Assy Lot: 2517212

TPS7H4001-SHP

		3.2 __VrefCapNoLoad3V		
	Test Site	Junkins Lab- Dallas	Junkins Lab- Dallas	
	Tester	ETS364/FETS36412	ETS364/FETS36412	
	Test Number	EB588003	EB588003	
	Unit	V	V	
	Max Limit	1.239	1.239	
	Min Limit	1.178	1.178	
krad(Si)	Serial #	Pre Biased	Post Biased	Delta
100	1	1.207	1.205	-0.002
100	2	1.212	1.210	-0.003
100	3	1.211	1.210	-0.001
100	4	1.207	1.206	-0.001
100	5	1.211	1.209	-0.002
100	6	1.208	1.206	-0.002
100	9	1.213	1.211	-0.002
100	10	1.208	1.206	-0.002
100	11	1.210	1.208	-0.003
100	12	1.212	1.210	-0.001
100	13	1.208	1.206	-0.002
100	14	1.210	1.208	-0.002
100	15	1.209	1.207	-0.002
100	16	1.210	1.207	-0.003
100	17	1.209	1.208	-0.002
100	18	1.202	1.200	-0.002
100	19	1.210	1.207	-0.002
100	20	1.216	1.214	-0.002
100	21	1.206	1.204	-0.002
100	22	1.212	1.209	-0.003
100	23	1.206	1.204	-0.002
100	24	1.218	1.216	-0.002
50	36	1.213	1.213	0.000
50	37	1.214	1.213	-0.001
50	38	1.211	1.211	0.000
50	39	1.214	1.213	-0.001
50	40	1.215	1.213	-0.002
30	46	1.212	1.211	-0.001
30	47	1.212	1.212	0.000
30	48	1.215	1.215	0.000
30	49	1.214	1.213	-0.001
30	50	1.205	1.205	0.000
10	56	1.204	1.204	0.000
10	57	1.217	1.217	0.000
10	58	1.212	1.212	-0.001
10	59	1.215	1.215	0.000
10	60	1.206	1.206	0.000
3	66	1.211	1.211	0.000
3	67	1.209	1.210	0.000
3	68	1.208	1.208	0.000
3	69	1.214	1.214	0.000
3	70	1.203	1.203	0.000
0	33	1.215	1.215	0.000
0	34	1.217	1.217	0.000
0	35	1.211	1.211	0.000
	Max	1.218	1.217	0.000
	Average	1.211	1.210	-0.001
	Min	1.202	1.200	-0.003
	Std Dev	0.004	0.004	0.001



	3.2 __VrefCapNoLoad3V					
Test Site	unkins Lab- Dallas					
Tester	TS364/FETS36412					
Test Number	EB588003					
Max Limit	1.239	V				
Min Limit	1.178	V				
krad(Si)	3	0	10	30	50	100
LL	1.178	1.178	1.178	1.178	1.178	1.178
Min	1.203	1.211	1.204	1.205	1.211	1.200
Average	1.209	1.214	1.211	1.211	1.213	1.208
Max	1.214	1.217	1.217	1.215	1.213	1.216
UL	1.239	1.239	1.239	1.239	1.239	1.239



TID/HDR Biased Report

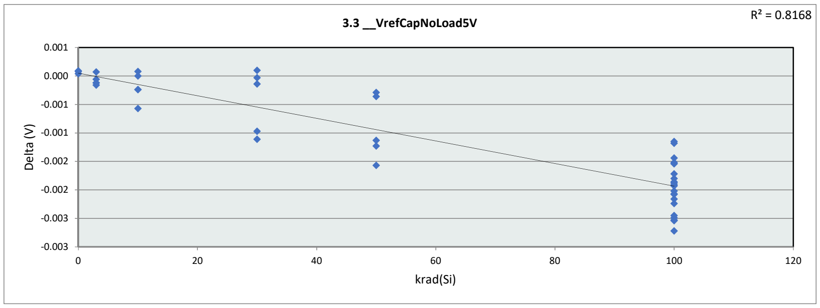
Die lot: 1087518

Exposure date: 11/15/2022

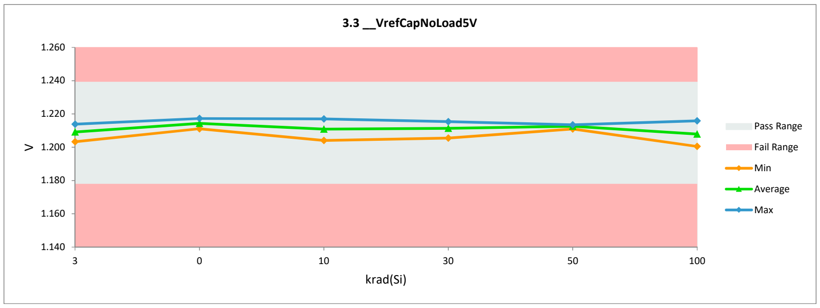
Assy Lot: 2517212

TPS7H4001-SHP

		3.3 __VrefCapNoLoad5V		
	Test Site	Junkins Lab- Dalla	Junkins Lab- Dallas	
	Tester	ETS364/FETS3641	ETS364/FETS36412	
	Test Number	EB588003	EB588003	
	Unit	V	V	
	Max Limit	1.239	1.239	
	Min Limit	1.178	1.178	
krad(Si)	Serial #	Pre Biased	Post Biased	Delta
100	1	1.207	1.205	-0.002
100	2	1.212	1.210	-0.003
100	3	1.211	1.210	-0.001
100	4	1.207	1.206	-0.001
100	5	1.211	1.209	-0.002
100	6	1.208	1.206	-0.002
100	9	1.213	1.211	-0.002
100	10	1.208	1.206	-0.002
100	11	1.210	1.208	-0.002
100	12	1.212	1.210	-0.001
100	13	1.208	1.206	-0.002
100	14	1.210	1.208	-0.002
100	15	1.209	1.208	-0.002
100	16	1.210	1.208	-0.003
100	17	1.209	1.208	-0.002
100	18	1.203	1.200	-0.002
100	19	1.210	1.208	-0.002
100	20	1.216	1.214	-0.002
100	21	1.206	1.204	-0.002
100	22	1.212	1.209	-0.003
100	23	1.206	1.204	-0.002
100	24	1.218	1.216	-0.002
50	36	1.213	1.213	0.000
50	37	1.215	1.213	-0.001
50	38	1.211	1.211	0.000
50	39	1.214	1.213	-0.001
50	40	1.215	1.213	-0.002
30	46	1.212	1.211	-0.001
30	47	1.212	1.212	0.000
30	48	1.215	1.215	0.000
30	49	1.214	1.213	-0.001
30	50	1.205	1.206	0.000
10	56	1.204	1.204	0.000
10	57	1.217	1.217	0.000
10	58	1.213	1.212	-0.001
10	59	1.215	1.215	0.000
10	60	1.207	1.206	0.000
3	66	1.211	1.211	0.000
3	67	1.210	1.210	0.000
3	68	1.208	1.208	0.000
3	69	1.214	1.214	0.000
3	70	1.203	1.203	0.000
0	33	1.215	1.215	0.000
0	34	1.217	1.217	0.000
0	35	1.211	1.211	0.000
	Max	1.218	1.217	0.000
	Average	1.211	1.210	-0.001
	Min	1.203	1.200	-0.003
	Std Dev	0.004	0.004	0.001



	3.3 __VrefCapNoLoad5V					
Test Site	unkins Lab- Dallas					
Tester	TS364/FETS36412					
Test Number	EB588003					
Max Limit	1.239	V				
Min Limit	1.178	V				
krad(Si)	3	0	10	30	50	100
LL	1.178	1.178	1.178	1.178	1.178	1.178
Min	1.203	1.211	1.204	1.206	1.211	1.200
Average	1.209	1.214	1.211	1.211	1.213	1.208
Max	1.214	1.217	1.217	1.215	1.213	1.216
UL	1.239	1.239	1.239	1.239	1.239	1.239



TID/HDR Biased Report

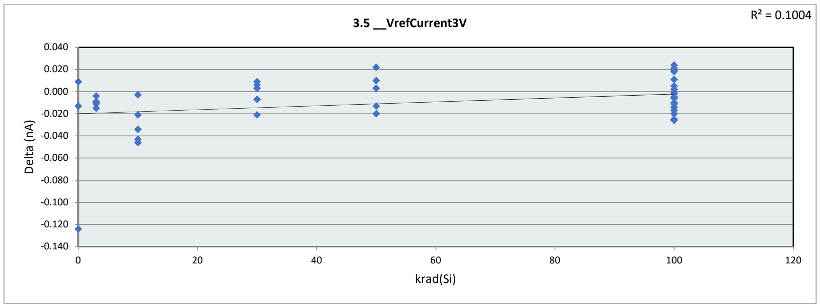
Die lot: 1087518

Exposure date: 11/15/2022

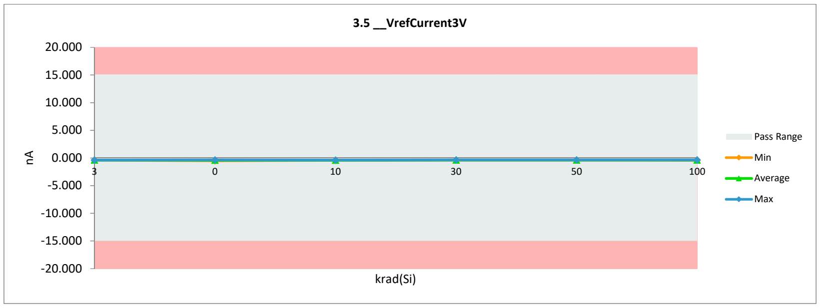
Assy Lot: 2517212

TPS7H4001-SHP

		3.5 __VrefCurrent3V		
	Test Site	Junkins Lab- Dalla	Junkins Lab- Dallas	
	Tester	ETS364/FETS3641	ETS364/FETS36412	
	Test Number	EB588003	EB588003	
	Unit	nA	nA	
	Max Limit	15	15	
	Min Limit	-15	-15	
krad(Si)	Serial #	Pre Biased	Post Biased	Delta
100	1	-0.395	-0.406	-0.011
100	2	-0.394	-0.399	-0.005
100	3	-0.389	-0.391	-0.002
100	4	-0.411	-0.400	0.011
100	5	-0.397	-0.376	0.021
100	6	-0.411	-0.393	0.018
100	9	-0.392	-0.387	0.005
100	10	-0.360	-0.385	-0.025
100	11	-0.378	-0.389	-0.011
100	12	-0.402	-0.378	0.024
100	13	-0.387	-0.392	-0.005
100	14	-0.390	-0.371	0.019
100	15	-0.372	-0.398	-0.026
100	16	-0.379	-0.389	-0.010
100	17	-0.377	-0.375	0.002
100	18	-0.382	-0.396	-0.014
100	19	-0.380	-0.405	-0.025
100	20	-0.372	-0.386	-0.014
100	21	-0.368	-0.385	-0.017
100	22	-0.360	-0.380	-0.020
100	23	-0.353	-0.354	-0.001
100	24	-0.379	-0.385	-0.006
50	36	-0.391	-0.381	0.010
50	37	-0.395	-0.373	0.022
50	38	-0.361	-0.381	-0.020
50	39	-0.365	-0.362	0.003
50	40	-0.361	-0.374	-0.013
30	46	-0.382	-0.379	0.003
30	47	-0.363	-0.384	-0.021
30	48	-0.371	-0.378	-0.007
30	49	-0.381	-0.372	0.009
30	50	-0.370	-0.364	0.006
10	56	-0.377	-0.380	-0.003
10	57	-0.370	-0.404	-0.034
10	58	-0.367	-0.413	-0.046
10	59	-0.361	-0.382	-0.021
10	60	-0.345	-0.388	-0.043
3	66	-0.381	-0.392	-0.011
3	67	-0.369	-0.378	-0.009
3	68	-0.361	-0.371	-0.010
3	69	-0.379	-0.383	-0.004
3	70	-0.373	-0.388	-0.015
0	33	-0.366	-0.357	0.009
0	34	-0.366	-0.379	-0.013
0	35	-0.364	-0.488	-0.124
	Max	-0.345	-0.354	0.024
	Average	-0.377	-0.386	-0.009
	Min	-0.411	-0.488	-0.124
	Std Dev	0.015	0.020	0.024



	3.5 __VrefCurrent3V					
Test Site	unkins Lab- Dallas					
Tester	TS364/FETS36412					
Test Number	EB588003					
Max Limit	15	nA				
Min Limit	-15	nA				
krad(Si)	3	0	10	30	50	100
LL	-15.000	-15.000	-15.000	-15.000	-15.000	-15.000
Min	-0.392	-0.488	-0.413	-0.384	-0.381	-0.406
Average	-0.382	-0.408	-0.393	-0.375	-0.374	-0.387
Max	-0.371	-0.357	-0.380	-0.364	-0.362	-0.354
UL	15.000	15.000	15.000	15.000	15.000	15.000



TID/HDR Biased Report

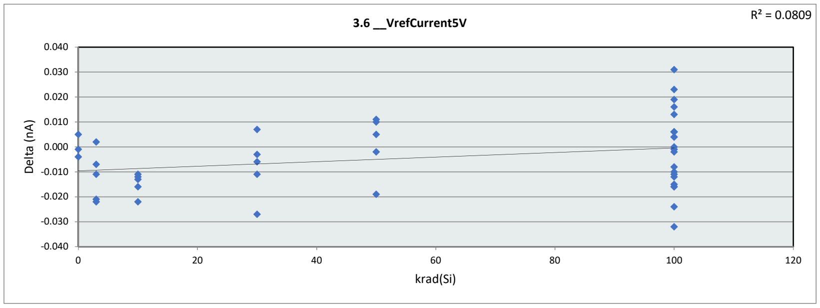
Die lot: 1087518 Exposure date: 11/15/2022

Assy Lot: 2517212

TPS7H4001-SHP

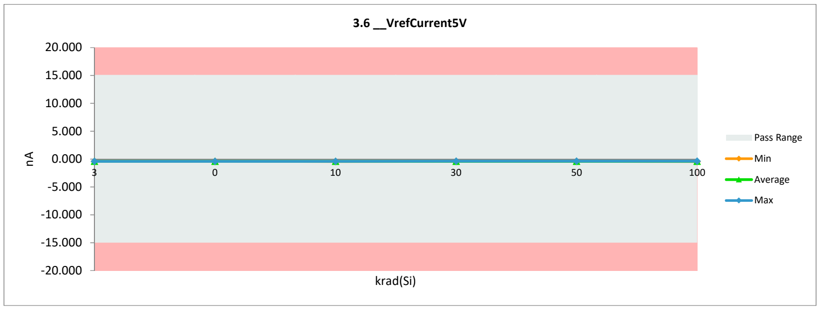
	3.6 __VrefCurrent5V	
Test Site	Junkins Lab- Dalla	Junkins Lab- Dallas
Tester	ETS364/FETS36412	ETS364/FETS36412
Test Number	EB588003	EB588003
Unit	nA	nA
Max Limit	15	15
Min Limit	-15	-15

krad(Si)	Serial #	Pre Biased	Post Biased	Delta
100	1	-0.415	-0.409	0.006
100	2	-0.434	-0.418	0.016
100	3	-0.412	-0.408	0.004
100	4	-0.432	-0.432	0.000
100	5	-0.420	-0.401	0.019
100	6	-0.429	-0.398	0.031
100	9	-0.408	-0.404	0.004
100	10	-0.412	-0.406	0.006
100	11	-0.391	-0.407	-0.016
100	12	-0.409	-0.396	0.013
100	13	-0.401	-0.402	-0.001
100	14	-0.431	-0.408	0.023
100	15	-0.405	-0.407	-0.002
100	16	-0.387	-0.419	-0.032
100	17	-0.395	-0.403	-0.008
100	18	-0.390	-0.402	-0.012
100	19	-0.411	-0.421	-0.010
100	20	-0.398	-0.414	-0.016
100	21	-0.377	-0.401	-0.024
100	22	-0.385	-0.396	-0.011
100	23	-0.389	-0.383	0.006
100	24	-0.385	-0.400	-0.015
50	36	-0.396	-0.391	0.005
50	37	-0.407	-0.409	-0.002
50	38	-0.410	-0.399	0.011
50	39	-0.402	-0.392	0.010
50	40	-0.379	-0.398	-0.019
30	46	-0.387	-0.414	-0.027
30	47	-0.393	-0.396	-0.003
30	48	-0.394	-0.405	-0.011
30	49	-0.400	-0.393	0.007
30	50	-0.383	-0.389	-0.006
10	56	-0.396	-0.407	-0.011
10	57	-0.403	-0.425	-0.022
10	58	-0.396	-0.408	-0.012
10	59	-0.390	-0.403	-0.013
10	60	-0.389	-0.405	-0.016
3	66	-0.399	-0.406	-0.007
3	67	-0.384	-0.406	-0.022
3	68	-0.390	-0.411	-0.021
3	69	-0.400	-0.398	0.002
3	70	-0.402	-0.413	-0.011
0	33	-0.394	-0.398	-0.004
0	34	-0.401	-0.396	0.005
0	35	-0.395	-0.396	-0.001
	Max	-0.377	-0.383	0.031
	Average	-0.400	-0.404	-0.004
	Min	-0.434	-0.432	-0.032
	Std Dev	0.014	0.010	0.014



	3.6 __VrefCurrent5V	
Test Site	unkins Lab- Dallas	
Tester	TS364/FETS36412	
Test Number	EB588003	
Max Limit	15	nA
Min Limit	-15	nA

krad(Si)	3	0	10	30	50	100
LL	-15.000	-15.000	-15.000	-15.000	-15.000	-15.000
Min	-0.413	-0.398	-0.425	-0.414	-0.409	-0.432
Average	-0.407	-0.397	-0.410	-0.399	-0.398	-0.406
Max	-0.398	-0.396	-0.403	-0.389	-0.391	-0.383
UL	15.000	15.000	15.000	15.000	15.000	15.000



TID/HDR Biased Report

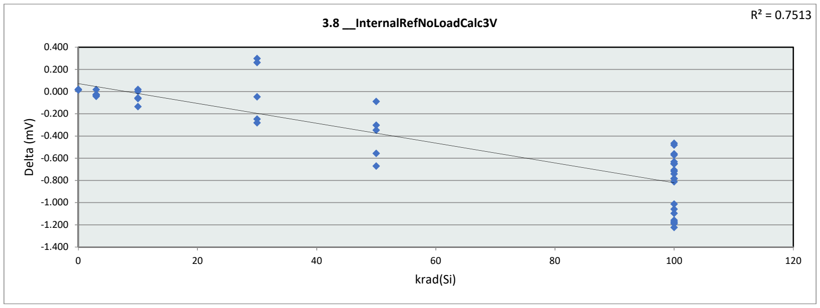
Die lot: 1087518

Exposure date: 11/15/2022

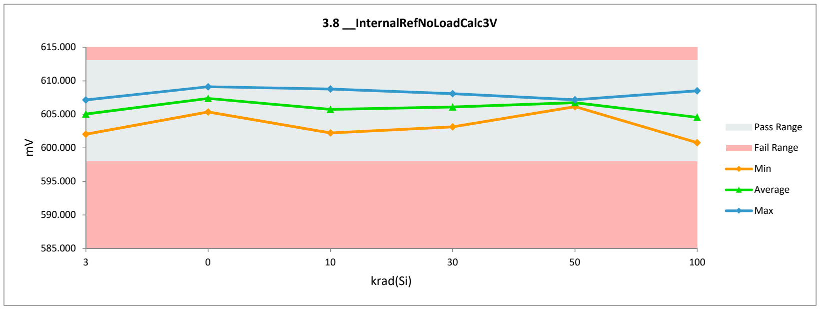
Assy Lot: 2517212

TPS7H4001-SHP

		3.8 __InternalRefNoLoadCalc3V		
	Test Site	Junkins Lab- Dalla	Junkins Lab- Dallas	
	Tester	ETS364/FETS36412	ETS364/FETS36412	
	Test Number	EB588003	EB588003	
	Unit	mV	mV	
	Max Limit	613	613	
	Min Limit	598	598	
krad(Si)	Serial #	Pre Biased	Post Biased	Delta
100	1	604.161	603.102	-1.059
100	2	607.049	605.860	-1.189
100	3	605.644	605.083	-0.561
100	4	604.444	603.873	-0.571
100	5	606.163	605.681	-0.482
100	6	604.356	603.638	-0.718
100	9	607.157	606.374	-0.783
100	10	603.746	602.934	-0.812
100	11	605.993	604.811	-1.182
100	12	606.381	605.749	-0.632
100	13	604.290	603.278	-1.012
100	14	605.084	604.437	-0.647
100	15	605.130	604.478	-0.652
100	16	605.678	604.506	-1.172
100	17	605.244	604.538	-0.706
100	18	601.570	600.786	-0.784
100	19	605.931	604.773	-1.158
100	20	608.467	607.725	-0.742
100	21	603.282	602.186	-1.096
100	22	605.890	604.666	-1.224
100	23	604.049	603.399	-0.650
100	24	608.984	608.518	-0.466
50	36	607.023	606.934	-0.089
50	37	607.344	606.788	-0.556
50	38	606.498	606.150	-0.348
50	39	607.474	607.171	-0.303
50	40	607.355	606.684	-0.671
30	46	606.239	605.958	-0.281
30	47	606.407	606.360	-0.047
30	48	607.830	608.092	0.262
30	49	607.189	606.941	-0.248
30	50	602.852	603.150	0.298
10	56	602.282	602.225	-0.057
10	57	608.768	608.787	0.019
10	58	606.845	606.710	-0.135
10	59	607.936	607.938	0.002
10	60	603.128	603.065	-0.063
3	66	606.167	606.141	-0.026
3	67	605.271	605.289	0.018
3	68	604.658	604.616	-0.042
3	69	607.185	607.153	-0.032
3	70	602.076	602.045	-0.031
0	33	607.623	607.639	0.016
0	34	609.097	609.118	0.021
0	35	605.355	605.368	0.013
	Max	609.097	609.118	0.298
	Average	605.807	605.349	-0.457
	Min	601.570	600.786	-1.224
	Std Dev	1.869	1.983	0.439



	3.8 __InternalRefNoLoadCalc3V					
Test Site	unkins Lab- Dallas					
Tester	TS364/FETS36412					
Test Number	EB588003					
Max Limit	613	mV				
Min Limit	598	mV				
krad(Si)	3	0	10	30	50	100
LL	598.000	598.000	598.000	598.000	598.000	598.000
Min	602.045	605.368	602.225	603.150	606.150	600.786
Average	605.049	607.375	605.745	606.100	606.745	604.563
Max	607.153	609.118	608.787	608.092	607.171	608.518
UL	613.000	613.000	613.000	613.000	613.000	613.000



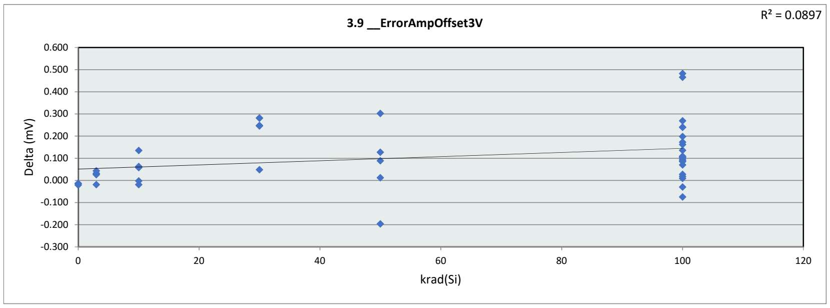
TID/HDR Biased Report

Die lot: 1087518 Exposure date: 11/15/2022

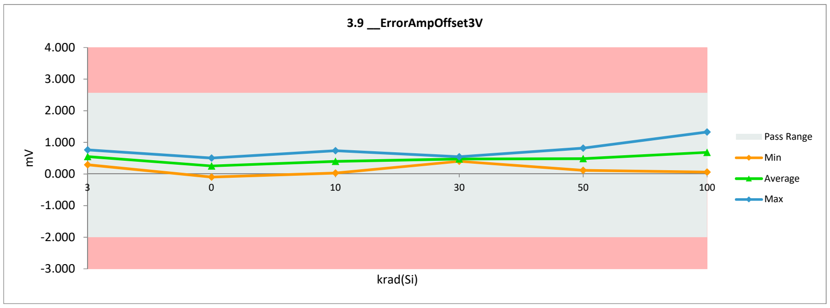
Assy Lot: 2517212

TPS7H4001-SHP

		3.9 __ErrorAmpOffset3V		
	Test Site	Junkins Lab- Dalla	Junkins Lab- Dallas	
	Tester	ETS364/FETS3641	ETS364/FETS36412	
	Test Number	EB588003	EB588003	
	Unit	mV	mV	
	Max Limit	2.55	2.55	
	Min Limit	-2	-2	
krad(Si)	Serial #	Pre Biased	Post Biased	Delta
100	1	0.567	0.537	-0.030
100	2	0.941	1.043	0.102
100	3	0.171	0.189	0.018
100	4	0.828	0.855	0.027
100	5	0.740	1.222	0.482
100	6	0.372	0.545	0.173
100	9	0.833	1.073	0.240
100	10	-0.107	0.162	0.269
100	11	0.910	1.004	0.094
100	12	0.522	0.610	0.088
100	13	0.437	0.362	-0.075
100	14	0.188	0.290	0.102
100	15	0.685	0.794	0.109
100	16	0.681	0.766	0.085
100	17	0.571	0.733	0.162
100	18	0.439	0.679	0.240
100	19	0.972	1.042	0.070
100	20	0.611	0.809	0.198
100	21	0.358	0.367	0.009
100	22	-0.075	0.061	0.136
100	23	1.222	1.328	0.106
100	24	0.094	0.560	0.466
50	36	0.423	0.512	0.089
50	37	0.103	0.115	0.012
50	38	0.949	0.753	-0.196
50	39	0.517	0.819	0.302
50	40	0.092	0.219	0.127
30	46	0.120	0.401	0.281
30	47	0.495	0.543	0.048
30	48	0.160	0.442	0.282
30	49	0.258	0.506	0.248
30	50	0.244	0.490	0.246
10	56	0.270	0.328	0.058
10	57	0.310	0.291	-0.019
10	58	0.602	0.737	0.135
10	59	0.598	0.596	-0.002
10	60	-0.032	0.031	0.063
3	66	0.736	0.762	0.026
3	67	0.545	0.526	-0.019
3	68	0.613	0.656	0.043
3	69	0.262	0.294	0.032
3	70	0.477	0.507	0.030
0	33	0.368	0.352	-0.016
0	34	0.525	0.504	-0.021
0	35	-0.083	-0.096	-0.013
	Max	1.222	1.328	0.482
	Average	0.456	0.563	0.107
	Min	-0.107	-0.096	-0.196
	Std Dev	0.312	0.318	0.134



	3.9 __ErrorAmpOffset3V					
Test Site	unkins Lab- Dallas					
Tester	TS364/FETS36412					
Test Number	EB588003					
Max Limit	2.55	mV				
Min Limit	-2	mV				
krad(Si)	3	0	10	30	50	100
LL	-2.000	-2.000	-2.000	-2.000	-2.000	-2.000
Min	0.294	-0.096	0.031	0.401	0.115	0.061
Average	0.549	0.253	0.397	0.476	0.484	0.683
Max	0.762	0.504	0.737	0.543	0.819	1.328
UL	2.550	2.550	2.550	2.550	2.550	2.550



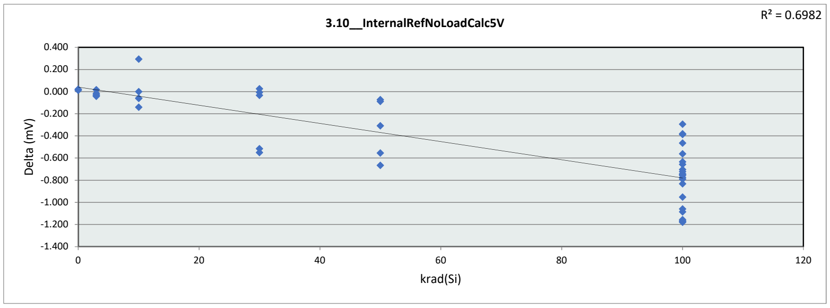
TID/HDR Biased Report

Die lot: 1087518 Exposure date: 11/15/2022

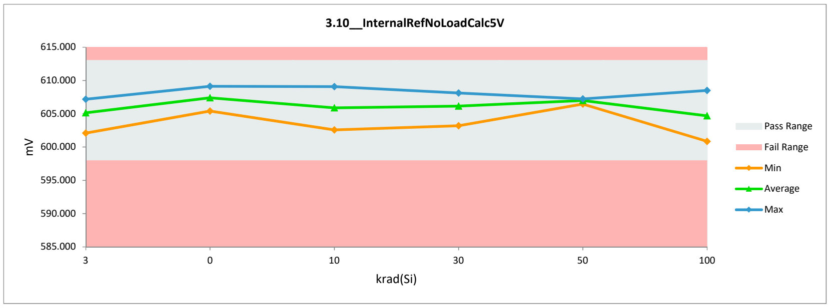
Assy Lot: 2517212

TPS7H4001-SHP

		3.10__InternalRefNoLoadCalc5V		
	Test Site	Junkins Lab- Dalla	Junkins Lab- Dallas	
	Tester	ETS364/FETS3641	ETS364/FETS36412	
	Test Number	EB588003	EB588003	
	Unit	mV	mV	
	Max Limit	613	613	
	Min Limit	598	598	
krad(Si)	Serial #	Pre Biased	Post Biased	Delta
100	1	604.216	603.440	-0.776
100	2	607.080	605.901	-1.179
100	3	605.683	605.389	-0.294
100	4	604.489	603.928	-0.561
100	5	606.474	605.719	-0.755
100	6	604.387	603.665	-0.722
100	9	607.188	606.397	-0.791
100	10	604.065	602.980	-1.085
100	11	606.008	604.842	-1.166
100	12	606.415	605.781	-0.634
100	13	604.337	603.595	-0.742
100	14	605.127	604.746	-0.381
100	15	605.171	604.785	-0.386
100	16	605.728	604.554	-1.174
100	17	605.281	604.577	-0.704
100	18	601.910	600.850	-1.060
100	19	605.959	604.803	-1.156
100	20	608.479	607.729	-0.750
100	21	603.308	602.476	-0.832
100	22	605.918	604.966	-0.952
100	23	604.131	603.474	-0.657
100	24	608.976	608.511	-0.465
50	36	607.330	607.241	-0.089
50	37	607.640	607.085	-0.555
50	38	606.533	606.460	-0.073
50	39	607.483	607.174	-0.309
50	40	607.664	606.998	-0.666
30	46	606.549	605.999	-0.550
30	47	606.421	606.387	-0.034
30	48	608.134	608.128	-0.006
30	49	607.501	606.986	-0.515
30	50	603.178	603.203	0.025
10	56	602.630	602.571	-0.059
10	57	608.782	609.075	0.293
10	58	606.887	606.746	-0.141
10	59	607.968	607.967	-0.001
10	60	603.178	603.117	-0.061
3	66	606.222	606.205	-0.017
3	67	605.577	605.594	0.017
3	68	604.707	604.665	-0.042
3	69	607.212	607.180	-0.032
3	70	602.130	602.101	-0.029
0	33	607.634	607.654	0.020
0	34	609.107	609.129	0.022
0	35	605.401	605.412	0.011
	Max	609.107	609.129	0.293
	Average	605.916	605.471	-0.445
	Min	601.910	600.850	-1.179
	Std Dev	1.844	1.960	0.418



	3.10__InternalRefNoLoadCalc5					
Test Site	unkins Lab- Dallas					
Tester	TS364/FETS36412					
Test Number	EB588003					
Max Limit	613	mV				
Min Limit	598	mV				
krad(Si)	3	0	10	30	50	100
LL	598.000	598.000	598.000	598.000	598.000	598.000
Min	602.101	605.412	602.571	603.203	606.460	600.850
Average	605.149	607.398	605.895	606.141	606.992	604.687
Max	607.180	609.129	609.075	608.128	607.241	608.511
UL	613.000	613.000	613.000	613.000	613.000	613.000



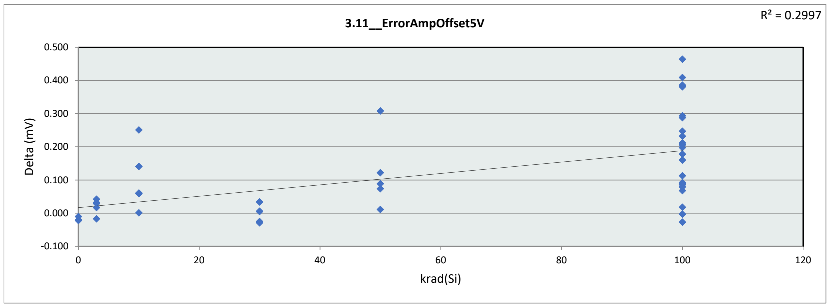
TID/HDR Biased Report

Die lot: 1087518 Exposure date: 11/15/2022

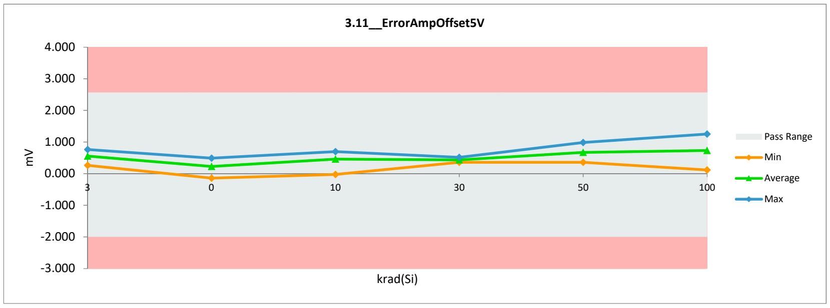
Assy Lot: 2517212

TPS7H4001-SHP

		3.11__ErrorAmpOffset5V		
	Test Site	Junkins Lab- Dalla	Junkins Lab- Dallas	
	Tester	ETS364/FETS3641	ETS364/FETS36412	
	Test Number	EB588003	EB588003	
	Unit	mV	mV	
	Max Limit	2.55	2.55	
	Min Limit	-2	-2	
krad(Si)	Serial #	Pre Biased	Post Biased	Delta
100	1	0.512	0.744	0.232
100	2	0.910	1.002	0.092
100	3	0.132	0.426	0.294
100	4	0.782	0.800	0.018
100	5	0.972	1.184	0.212
100	6	0.341	0.519	0.178
100	9	0.803	1.050	0.247
100	10	0.119	0.116	-0.003
100	11	0.895	0.974	0.079
100	12	0.488	0.578	0.090
100	13	0.391	0.589	0.198
100	14	0.145	0.526	0.381
100	15	0.644	1.030	0.386
100	16	0.631	0.717	0.086
100	17	0.534	0.694	0.160
100	18	0.642	0.615	-0.027
100	19	0.944	1.012	0.068
100	20	0.599	0.805	0.206
100	21	0.332	0.620	0.288
100	22	-0.103	0.306	0.409
100	23	1.140	1.253	0.113
100	24	0.103	0.567	0.464
50	36	0.661	0.750	0.089
50	37	0.351	0.362	0.011
50	38	0.913	0.987	0.074
50	39	0.508	0.816	0.308
50	40	0.327	0.449	0.122
30	46	0.354	0.360	0.006
30	47	0.482	0.516	0.034
30	48	0.401	0.406	0.005
30	49	0.490	0.461	-0.029
30	50	0.462	0.437	-0.025
10	56	0.466	0.525	0.059
10	57	0.296	0.547	0.251
10	58	0.559	0.700	0.141
10	59	0.566	0.567	0.001
10	60	-0.082	-0.021	0.061
3	66	0.681	0.698	0.017
3	67	0.782	0.765	-0.017
3	68	0.565	0.607	0.042
3	69	0.235	0.267	0.032
3	70	0.422	0.451	0.029
0	33	0.357	0.337	-0.020
0	34	0.515	0.493	-0.022
0	35	-0.130	-0.140	-0.010
	Max	1.140	1.253	0.464
	Average	0.492	0.610	0.118
	Min	-0.130	-0.140	-0.029
	Std Dev	0.289	0.292	0.133



	3.11__ErrorAmpOffset5V					
Test Site	unkins Lab- Dallas					
Tester	TS364/FETS36412					
Test Number	EB588003					
Max Limit	2.55	mV				
Min Limit	-2	mV				
krad(Si)	3	0	10	30	50	100
LL	-2.000	-2.000	-2.000	-2.000	-2.000	-2.000
Min	0.267	-0.140	-0.021	0.360	0.362	0.116
Average	0.558	0.230	0.464	0.436	0.673	0.733
Max	0.765	0.493	0.700	0.516	0.987	1.253
UL	2.550	2.550	2.550	2.550	2.550	2.550



TID/HDR Biased Report

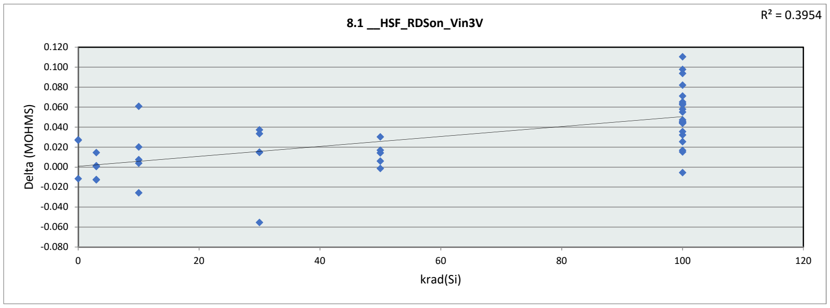
Die lot: 1087518 Exposure date: 11/15/2022

Assy Lot: 2517212

TPS7H4001-SHP

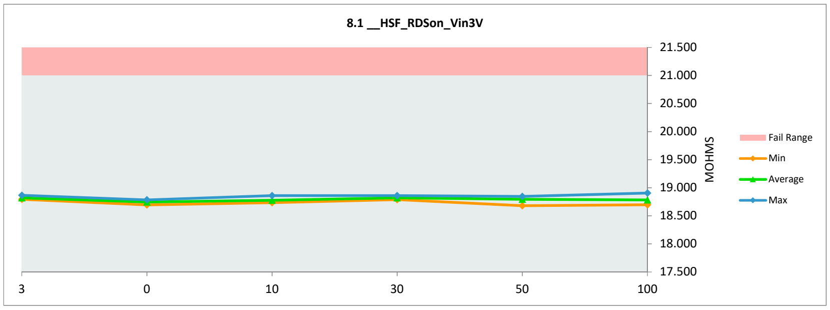
	8.1 __HSF_RDSon_Vin3V	
Test Site	Junkins Lab- Dalla	Junkins Lab- Dallas
Tester	ETS364/FETS3641	ETS364/FETS36412
Test Number	EB588003	EB588003
Unit	MOHMS	MOHMS
Max Limit	21	21
Min Limit		

krad(Si)	Serial #	Pre Biased	Post Biased	Delta
100	1	18.686	18.748	0.063
100	2	18.650	18.696	0.046
100	3	18.714	18.759	0.045
100	4	18.718	18.789	0.071
100	5	18.667	18.711	0.044
100	6	18.761	18.793	0.032
100	9	18.741	18.787	0.046
100	10	18.706	18.723	0.017
100	11	18.671	18.765	0.094
100	12	18.731	18.778	0.047
100	13	18.725	18.750	0.025
100	14	18.781	18.839	0.058
100	15	18.706	18.817	0.110
100	16	18.740	18.804	0.064
100	17	18.699	18.781	0.082
100	18	18.748	18.803	0.055
100	19	18.808	18.823	0.015
100	20	18.750	18.794	0.044
100	21	18.750	18.744	-0.006
100	22	18.750	18.816	0.065
100	23	18.784	18.819	0.036
100	24	18.807	18.904	0.098
50	36	18.814	18.844	0.030
50	37	18.681	18.680	-0.001
50	38	18.815	18.821	0.006
50	39	18.795	18.809	0.014
50	40	18.798	18.815	0.017
30	46	18.821	18.854	0.033
30	47	18.822	18.859	0.037
30	48	18.844	18.789	-0.055
30	49	18.775	18.790	0.015
30	50	18.785	18.800	0.015
10	56	18.798	18.859	0.061
10	57	18.761	18.781	0.020
10	58	18.726	18.734	0.007
10	59	18.730	18.734	0.004
10	60	18.797	18.772	-0.026
3	66	18.806	18.807	0.001
3	67	18.850	18.837	-0.013
3	68	18.808	18.795	-0.013
3	69	18.794	18.795	0.000
3	70	18.850	18.865	0.014
0	33	18.757	18.784	0.027
0	34	18.667	18.694	0.027
0	35	18.769	18.757	-0.012
	Max	18.850	18.904	0.110
	Average	18.759	18.789	0.030
	Min	18.650	18.680	-0.055
	Std Dev	0.053	0.048	0.034



	8.1 __HSF_RDSon_Vin3V				
Test Site	unkins Lab- Dallas				
Tester	TS364/FETS36412				
Test Number	EB588003				
Max Limit	21	MOHMS			
Min Limit		MOHMS			

krad(Si)	3	0	10	30	50	100
LL						
Min	18.795	18.695	18.734	18.789	18.680	18.696
Average	18.820	18.745	18.776	18.819	18.794	18.784
Max	18.865	18.784	18.859	18.859	18.844	18.904
UL	21.000	21.000	21.000	21.000	21.000	21.000



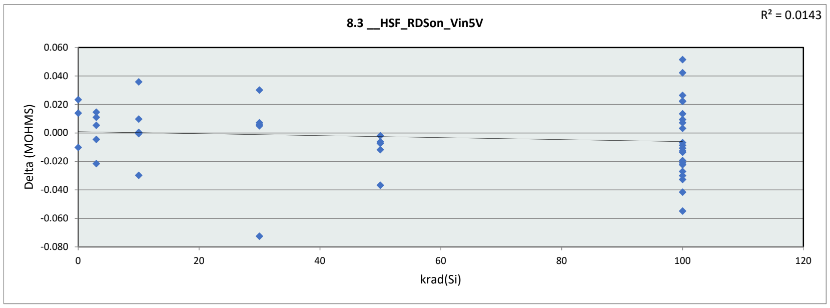
TID/HDR Biased Report

Die lot: 1087518 Exposure date: 11/15/2022

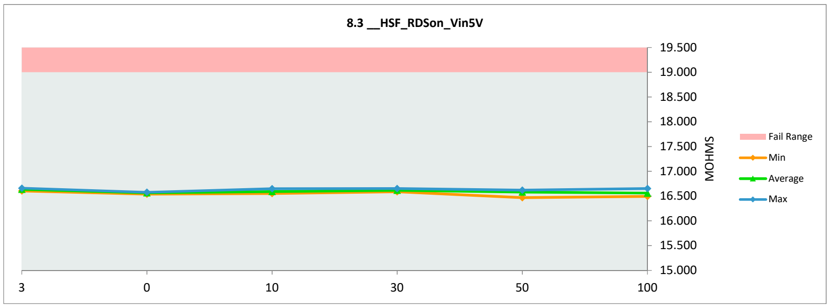
Assy Lot: 2517212

TPS7H4001-SHP

		8.3 __HSF_RDSon_Vin5V		
	Test Site	Junkins Lab- Dalla	Junkins Lab- Dallas	
	Tester	ETS364/FETS3641	ETS364/FETS36412	
	Test Number	EB588003	EB588003	
	Unit	MOHMS	MOHMS	
	Max Limit	19	19	
	Min Limit			
krad(Si)	Serial #	Pre Biased	Post Biased	Delta
100	1	16.522	16.526	0.003
100	2	16.516	16.495	-0.021
100	3	16.534	16.525	-0.009
100	4	16.527	16.549	0.022
100	5	16.507	16.494	-0.013
100	6	16.571	16.549	-0.022
100	9	16.585	16.578	-0.007
100	10	16.542	16.512	-0.030
100	11	16.531	16.553	0.022
100	12	16.573	16.562	-0.011
100	13	16.571	16.552	-0.019
100	14	16.600	16.587	-0.014
100	15	16.546	16.588	0.042
100	16	16.573	16.586	0.014
100	17	16.537	16.563	0.026
100	18	16.575	16.582	0.007
100	19	16.608	16.581	-0.027
100	20	16.602	16.560	-0.042
100	21	16.600	16.546	-0.055
100	22	16.583	16.592	0.009
100	23	16.622	16.590	-0.033
100	24	16.601	16.653	0.052
50	36	16.615	16.612	-0.002
50	37	16.506	16.469	-0.037
50	38	16.603	16.596	-0.007
50	39	16.625	16.613	-0.012
50	40	16.627	16.621	-0.006
30	46	16.619	16.624	0.005
30	47	16.621	16.651	0.030
30	48	16.659	16.586	-0.073
30	49	16.603	16.609	0.006
30	50	16.612	16.619	0.007
10	56	16.612	16.648	0.036
10	57	16.601	16.610	0.010
10	58	16.565	16.565	0.000
10	59	16.553	16.552	0.000
10	60	16.603	16.573	-0.030
3	66	16.625	16.636	0.011
3	67	16.677	16.655	-0.021
3	68	16.634	16.630	-0.005
3	69	16.597	16.603	0.005
3	70	16.645	16.660	0.015
0	33	16.553	16.576	0.023
0	34	16.527	16.540	0.014
0	35	16.587	16.577	-0.010
	Max	16.677	16.660	0.052
	Average	16.584	16.581	-0.003
	Min	16.506	16.469	-0.073
	Std Dev	0.042	0.045	0.025



	8.3 __HSF_RDSon_Vin5V					
Test Site	unkins Lab- Dallas					
Tester	TS364/FETS36412					
Test Number	EB588003					
Max Limit	19	MOHMS				
Min Limit		MOHMS				
krad(Si)	3	0	10	30	50	100
LL						
Min	16.603	16.540	16.552	16.586	16.469	16.495
Average	16.637	16.565	16.590	16.618	16.582	16.560
Max	16.660	16.577	16.648	16.651	16.621	16.653
UL	19.000	19.000	19.000	19.000	19.000	19.000



TID/HDR Biased Report

Die lot: 1087518

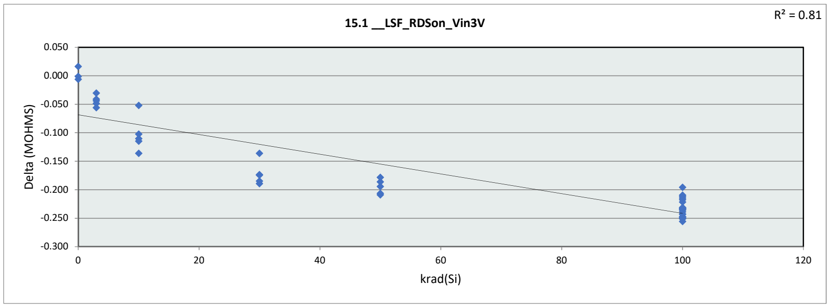
Exposure date: 11/15/2022

Assy Lot: 2517212

TPS7H4001-SHP

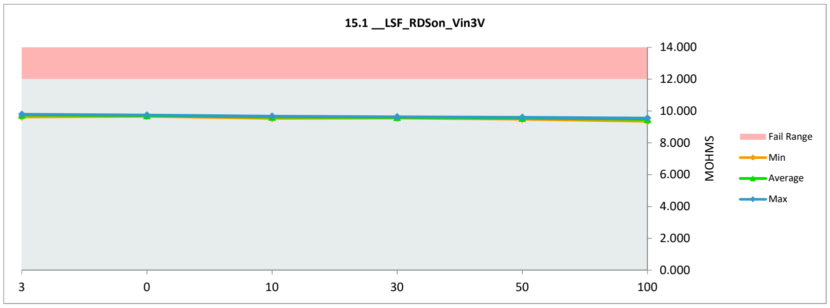
	15.1 __LSF_RDSon_Vin3V	
Test Site	Junkins Lab- Dallas	Junkins Lab- Dallas
Tester	ETS364/FETS36412	ETS364/FETS36412
Test Number	EB588003	EB588003
Unit	MOHMS	MOHMS
Max Limit	12	12
Min Limit		

krad(Si)	Serial #	Pre Biased	Post Biased	Delta
100	1	9.600	9.349	-0.251
100	2	9.701	9.469	-0.232
100	3	9.622	9.391	-0.231
100	4	9.656	9.409	-0.247
100	5	9.700	9.464	-0.236
100	6	9.649	9.410	-0.239
100	9	9.781	9.525	-0.256
100	10	9.670	9.427	-0.243
100	11	9.776	9.528	-0.248
100	12	9.667	9.452	-0.215
100	13	9.738	9.542	-0.196
100	14	9.684	9.433	-0.251
100	15	9.747	9.512	-0.234
100	16	9.717	9.484	-0.233
100	17	9.690	9.457	-0.233
100	18	9.714	9.502	-0.212
100	19	9.635	9.414	-0.222
100	20	9.802	9.554	-0.248
100	21	9.691	9.481	-0.210
100	22	9.744	9.510	-0.234
100	23	9.749	9.531	-0.217
100	24	9.725	9.482	-0.243
50	36	9.723	9.528	-0.194
50	37	9.739	9.533	-0.207
50	38	9.693	9.484	-0.209
50	39	9.759	9.573	-0.186
50	40	9.788	9.610	-0.178
30	46	9.743	9.558	-0.185
30	47	9.730	9.556	-0.174
30	48	9.820	9.631	-0.189
30	49	9.813	9.639	-0.174
30	50	9.748	9.612	-0.136
10	56	9.701	9.649	-0.052
10	57	9.793	9.678	-0.115
10	58	9.722	9.620	-0.102
10	59	9.720	9.610	-0.110
10	60	9.673	9.537	-0.136
3	66	9.831	9.800	-0.030
3	67	9.801	9.753	-0.049
3	68	9.817	9.761	-0.056
3	69	9.669	9.628	-0.041
3	70	9.821	9.778	-0.044
0	33	9.711	9.705	-0.006
0	34	9.735	9.751	0.016
0	35	9.663	9.662	-0.001
	Max	9.831	9.800	0.016
	Average	9.726	9.555	-0.171
	Min	9.600	9.349	-0.256
	Std Dev	0.057	0.112	0.082



	15.1 __LSF_RDSon_Vin3V	
Test Site	unkins Lab- Dallas	
Tester	TS364/FETS36412	
Test Number	EB588003	
Max Limit	12	MOHMS
Min Limit		MOHMS

krad(Si)	3	0	10	30	50	100
LL						
Min	9.628	9.662	9.537	9.556	9.485	9.349
Average	9.744	9.706	9.619	9.599	9.546	9.469
Max	9.800	9.751	9.678	9.639	9.610	9.554
UL	12.000	12.000	12.000	12.000	12.000	12.000



TID/HDR Biased Report

Die lot: 1087518

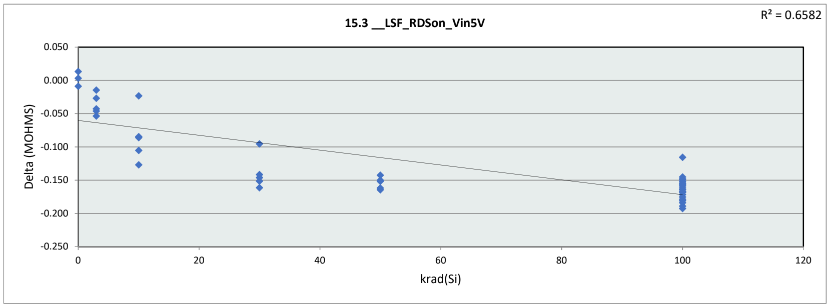
Exposure date: 11/15/2022

Assy Lot: 2517212

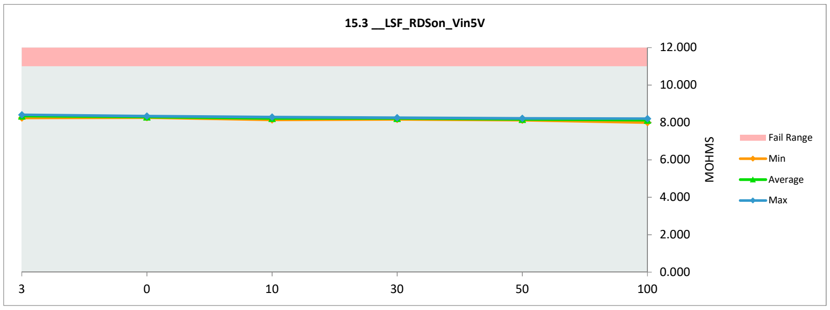
TPS7H4001-SHP

	15.3 __LSF_RDSon_Vin5V		
Test Site	Junkins Lab- Dalla	Junkins Lab- Dallas	
Tester	ETS364/FETS3641	ETS364/FETS36412	
Test Number	EB588003	EB588003	
Unit	MOHMS	MOHMS	
Max Limit	11	11	
Min Limit			

krad(Si)	Serial #	Pre Biased	Post Biased	Delta
100	1	8.188	7.995	-0.193
100	2	8.259	8.106	-0.152
100	3	8.207	8.039	-0.168
100	4	8.218	8.034	-0.184
100	5	8.274	8.124	-0.150
100	6	8.229	8.061	-0.168
100	9	8.362	8.202	-0.160
100	10	8.255	8.076	-0.179
100	11	8.356	8.175	-0.181
100	12	8.270	8.112	-0.158
100	13	8.303	8.188	-0.116
100	14	8.241	8.052	-0.189
100	15	8.335	8.179	-0.156
100	16	8.316	8.145	-0.172
100	17	8.281	8.113	-0.167
100	18	8.327	8.163	-0.165
100	19	8.221	8.066	-0.155
100	20	8.362	8.187	-0.175
100	21	8.280	8.132	-0.148
100	22	8.333	8.170	-0.163
100	23	8.335	8.190	-0.145
100	24	8.306	8.139	-0.167
50	36	8.286	8.136	-0.150
50	37	8.300	8.136	-0.164
50	38	8.270	8.118	-0.152
50	39	8.366	8.205	-0.162
50	40	8.356	8.214	-0.143
30	46	8.329	8.167	-0.161
30	47	8.307	8.165	-0.142
30	48	8.394	8.243	-0.152
30	49	8.399	8.253	-0.146
30	50	8.332	8.236	-0.095
10	56	8.259	8.236	-0.023
10	57	8.368	8.282	-0.086
10	58	8.290	8.206	-0.085
10	59	8.315	8.210	-0.105
10	60	8.265	8.138	-0.127
3	66	8.434	8.407	-0.027
3	67	8.393	8.379	-0.015
3	68	8.416	8.363	-0.053
3	69	8.280	8.237	-0.043
3	70	8.366	8.319	-0.046
0	33	8.286	8.278	-0.009
0	34	8.319	8.333	0.013
0	35	8.254	8.257	0.003
	Max	8.434	8.407	0.013
	Average	8.308	8.181	-0.126
	Min	8.188	7.995	-0.193
	Std Dev	0.058	0.093	0.059



	15.3 __LSF_RDSon_Vin5V					
Test Site	unkins Lab- Dallas					
Tester	TS364/FETS36412					
Test Number	EB588003					
Max Limit	11	MOHMS				
Min Limit		MOHMS				
krad(Si)	3	0	10	30	50	100
LL						
Min	8.237	8.257	8.138	8.165	8.118	7.995
Average	8.341	8.289	8.214	8.213	8.162	8.120
Max	8.407	8.333	8.282	8.253	8.214	8.202
UL	11.000	11.000	11.000	11.000	11.000	11.000



TID/HDR Biased Report

Die lot: 1087518

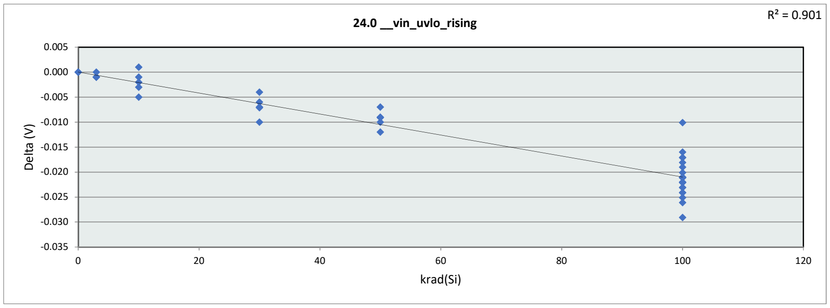
Exposure date: 11/15/2022

Assy Lot: 2517212

TPS7H4001-SHP

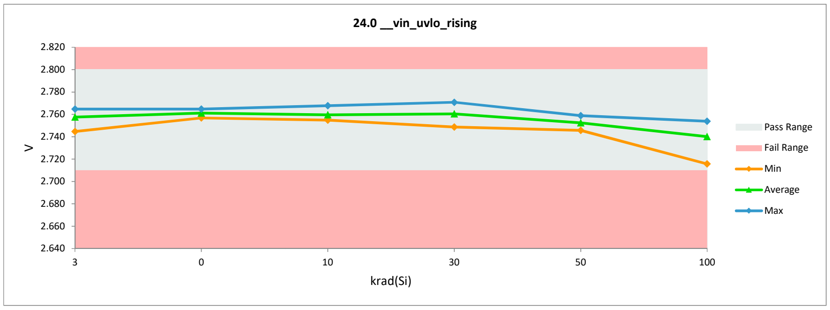
	24.0 __vin_uvlo_rising	
Test Site	Junkins Lab- Dalla	Junkins Lab- Dallas
Tester	ETS364/FETS3641	ETS364/FETS36412
Test Number	EB588003	EB588003
Unit	V	V
Max Limit	2.8	2.8
Min Limit	2.71	2.71

krad(Si)	Serial #	Pre Biased	Post Biased	Delta
100	1	2.771	2.748	-0.023
100	2	2.765	2.744	-0.021
100	3	2.767	2.747	-0.020
100	4	2.760	2.734	-0.026
100	5	2.770	2.754	-0.016
100	6	2.759	2.737	-0.022
100	9	2.756	2.746	-0.010
100	10	2.764	2.743	-0.021
100	11	2.755	2.738	-0.017
100	12	2.769	2.750	-0.019
100	13	2.747	2.726	-0.021
100	14	2.764	2.740	-0.024
100	15	2.758	2.740	-0.018
100	16	2.770	2.749	-0.021
100	17	2.757	2.728	-0.029
100	18	2.757	2.740	-0.017
100	19	2.770	2.745	-0.025
100	20	2.770	2.748	-0.022
100	21	2.738	2.716	-0.022
100	22	2.765	2.742	-0.023
100	23	2.763	2.742	-0.021
100	24	2.755	2.731	-0.024
50	36	2.763	2.751	-0.012
50	37	2.766	2.756	-0.010
50	38	2.755	2.746	-0.009
50	39	2.758	2.751	-0.007
50	40	2.768	2.759	-0.009
30	46	2.777	2.771	-0.006
30	47	2.760	2.756	-0.004
30	48	2.771	2.761	-0.010
30	49	2.773	2.766	-0.007
30	50	2.756	2.749	-0.007
10	56	2.764	2.762	-0.002
10	57	2.754	2.755	0.001
10	58	2.760	2.755	-0.005
10	59	2.771	2.768	-0.003
10	60	2.760	2.759	-0.001
3	66	2.761	2.760	-0.001
3	67	2.763	2.763	0.000
3	68	2.757	2.756	-0.001
3	69	2.766	2.765	-0.001
3	70	2.746	2.745	-0.001
0	33	2.765	2.765	0.000
0	34	2.757	2.757	0.000
0	35	2.762	2.762	0.000
	Max	2.777	2.771	0.001
	Average	2.762	2.749	-0.012
	Min	2.738	2.716	-0.029
	Std Dev	0.008	0.012	0.009



	24.0 __vin_uvlo_rising	
Test Site	unkins Lab- Dallas	
Tester	TS364/FETS36412	
Test Number	EB588003	
Max Limit	2.8	V
Min Limit	2.71	V

krad(Si)	3	0	10	30	50	100
LL	2.710	2.710	2.710	2.710	2.710	2.710
Min	2.745	2.757	2.755	2.749	2.746	2.716
Average	2.758	2.761	2.760	2.760	2.752	2.740
Max	2.765	2.765	2.768	2.771	2.759	2.754
UL	2.800	2.800	2.800	2.800	2.800	2.800



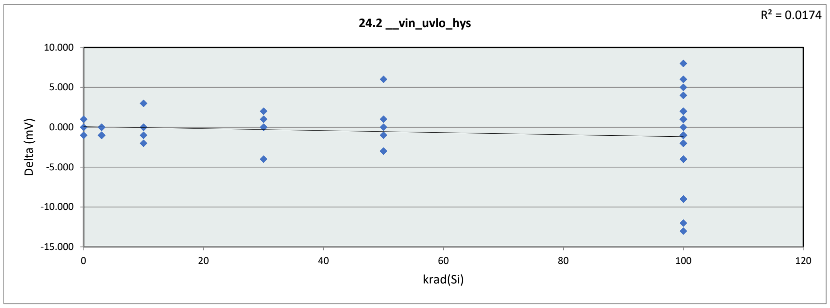
TID/HDR Biased Report

Die lot: 1087518 Exposure date: 11/15/2022

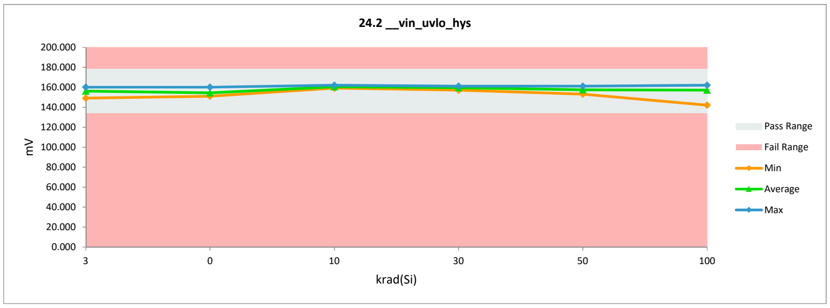
Assy Lot: 2517212

TPS7H4001-SHP

		24.2 __vin_uvlo_hys		
	Test Site	Junkins Lab- Dalla	Junkins Lab- Dallas	
	Tester	ETS364/FETS3641	ETS364/FETS36412	
	Test Number	EB588003	EB588003	
	Unit	mV	mV	
	Max Limit	178	178	
	Min Limit	134	134	
krad(Si)	Serial #	Pre Biased	Post Biased	Delta
100	1	161.161	160.160	-1.001
100	2	158.158	160.160	2.002
100	3	162.162	160.160	-2.002
100	4	160.160	147.147	-13.013
100	5	161.161	162.162	1.001
100	6	162.162	160.160	-2.002
100	9	151.151	159.159	8.008
100	10	159.159	160.160	1.001
100	11	161.161	160.160	-1.001
100	12	162.162	161.161	-1.001
100	13	149.149	153.153	4.004
100	14	160.160	151.151	-9.009
100	15	161.161	152.152	-9.009
100	16	156.156	161.161	5.005
100	17	154.154	142.142	-12.012
100	18	159.159	160.160	1.001
100	19	160.160	160.160	0.000
100	20	162.162	158.158	-4.004
100	21	156.156	152.152	-4.004
100	22	155.155	161.161	6.006
100	23	158.158	160.160	2.002
100	24	155.155	154.154	-1.001
50	36	156.156	153.153	-3.003
50	37	157.157	157.157	0.000
50	38	149.149	155.155	6.006
50	39	160.160	161.161	1.001
50	40	162.162	161.161	-1.001
30	46	158.158	158.158	0.000
30	47	159.159	160.160	1.001
30	48	161.161	157.157	-4.004
30	49	159.159	161.161	2.002
30	50	161.161	161.161	0.000
10	56	160.160	160.160	0.000
10	57	158.158	161.161	3.003
10	58	162.162	160.160	-2.002
10	59	160.160	159.159	-1.001
10	60	162.162	162.162	0.000
3	66	150.150	149.149	-1.001
3	67	155.155	155.155	0.000
3	68	158.158	157.157	-1.001
3	69	160.160	159.159	-1.001
3	70	160.160	160.160	0.000
0	33	159.159	160.160	1.001
0	34	152.152	151.151	-1.001
0	35	152.152	152.152	0.000
	Max	162.162	162.162	8.008
	Average	158.202	157.535	-0.667
	Min	149.149	142.142	-13.013
	Std Dev	3.715	4.519	4.100



	24.2 __vin_uvlo_hys					
Test Site	unkins Lab- Dallas					
Tester	TS364/FETS36412					
Test Number	EB588003					
Max Limit	178	mV				
Min Limit	134	mV				
krad(Si)	3	0	10	30	50	100
LL	134.000	134.000	134.000	134.000	134.000	134.000
Min	149.149	151.151	159.159	157.157	153.153	142.142
Average	156.156	154.488	160.560	159.559	157.557	157.112
Max	160.160	160.160	162.162	161.161	161.161	162.162
UL	178.000	178.000	178.000	178.000	178.000	178.000



TID/HDR Biased Report

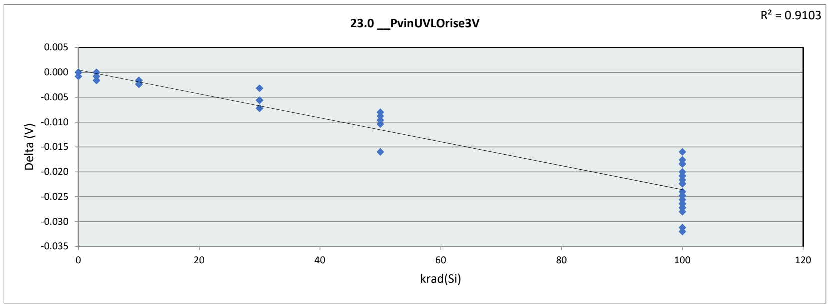
Die lot: 1087518

Exposure date: 11/15/2022

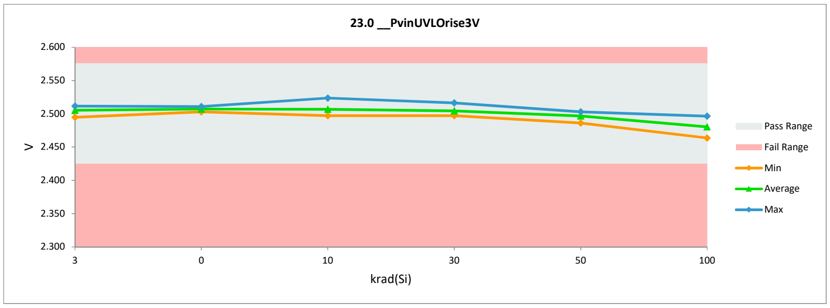
Assy Lot: 2517212

TPS7H4001-SHP

		23.0 __PvinUVLOrise3V		
	Test Site	Junkins Lab- Dalla	Junkins Lab- Dallas	
	Tester	ETS364/FETS36412	ETS364/FETS36412	
	Test Number	EB588003	EB588003	
	Unit	V	V	
	Max Limit	2.575	2.575	
	Min Limit	2.425	2.425	
krad(Si)	Serial #	Pre Biased	Post Biased	Delta
100	1	2.509	2.493	-0.016
100	2	2.504	2.480	-0.025
100	3	2.505	2.477	-0.028
100	4	2.505	2.479	-0.026
100	5	2.508	2.488	-0.021
100	6	2.500	2.472	-0.027
100	9	2.505	2.479	-0.026
100	10	2.503	2.477	-0.026
100	11	2.500	2.477	-0.022
100	12	2.503	2.482	-0.021
100	13	2.501	2.470	-0.031
100	14	2.508	2.484	-0.025
100	15	2.507	2.483	-0.024
100	16	2.504	2.483	-0.022
100	17	2.500	2.473	-0.027
100	18	2.502	2.480	-0.022
100	19	2.504	2.472	-0.032
100	20	2.514	2.496	-0.018
100	21	2.484	2.464	-0.020
100	22	2.512	2.493	-0.018
100	23	2.504	2.477	-0.026
100	24	2.508	2.490	-0.018
50	36	2.508	2.499	-0.009
50	37	2.508	2.500	-0.008
50	38	2.502	2.486	-0.016
50	39	2.505	2.496	-0.010
50	40	2.513	2.503	-0.010
30	46	2.508	2.505	-0.003
30	47	2.504	2.497	-0.007
30	48	2.522	2.516	-0.006
30	49	2.508	2.503	-0.006
30	50	2.507	2.500	-0.007
10	56	2.506	2.504	-0.002
10	57	2.507	2.505	-0.002
10	58	2.506	2.504	-0.002
10	59	2.526	2.524	-0.002
10	60	2.500	2.497	-0.002
3	66	2.508	2.506	-0.002
3	67	2.507	2.507	0.000
3	68	2.508	2.508	-0.001
3	69	2.512	2.512	0.000
3	70	2.496	2.495	-0.002
0	33	2.512	2.511	-0.001
0	34	2.508	2.508	0.000
0	35	2.503	2.503	0.000
	Max	2.526	2.524	0.000
	Average	2.506	2.492	-0.014
	Min	2.484	2.464	-0.032
	Std Dev	0.006	0.014	0.011



	23.0 __PvinUVLOrise3V					
Test Site	unkins Lab- Dallas					
Tester	TS364/FETS36412					
Test Number	EB588003					
Max Limit	2.575	V				
Min Limit	2.425	V				
krad(Si)	3	0	10	30	50	100
LL	2.425	2.425	2.425	2.425	2.425	2.425
Min	2.495	2.503	2.497	2.497	2.486	2.464
Average	2.505	2.507	2.507	2.504	2.497	2.480
Max	2.512	2.511	2.524	2.516	2.503	2.496
UL	2.575	2.575	2.575	2.575	2.575	2.575



TID/HDR Biased Report

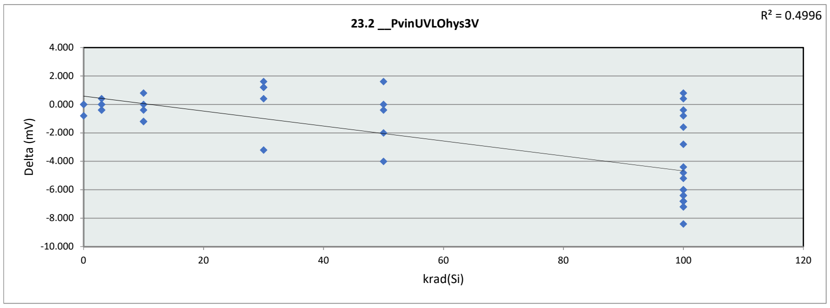
Die lot: 1087518

Exposure date: 11/15/2022

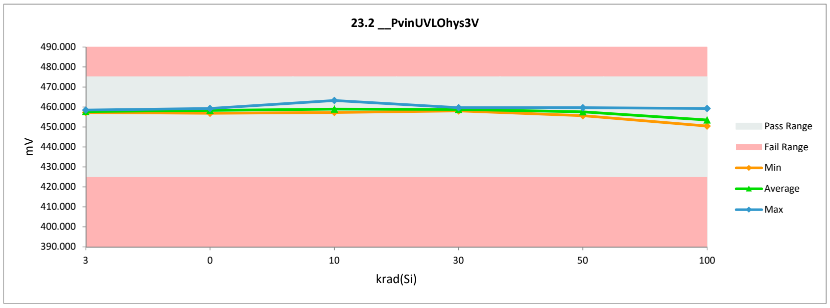
Assy Lot: 2517212

TPS7H4001-SHP

		23.2 __PvinUVLOhys3V		
	Test Site	Junkins Lab- Dalla	Junkins Lab- Dallas	
	Tester	ETS364/FETS3641	ETS364/FETS36412	
	Test Number	EB588003	EB588003	
	Unit	mV	mV	
	Max Limit	475	475	
	Min Limit	425	425	
krad(Si)	Serial #	Pre Biased	Post Biased	Delta
100	1	458.458	456.857	-1.601
100	2	459.659	452.853	-6.806
100	3	456.857	450.450	-6.407
100	4	459.259	452.052	-7.207
100	5	458.858	456.056	-2.802
100	6	458.459	451.651	-6.808
100	9	459.259	452.052	-7.207
100	10	458.058	451.651	-6.407
100	11	459.660	452.853	-6.807
100	12	459.259	454.054	-5.205
100	13	458.859	450.450	-8.409
100	14	457.657	453.254	-4.403
100	15	458.459	453.654	-4.805
100	16	458.458	452.453	-6.005
100	17	459.259	452.452	-6.807
100	18	458.458	451.652	-6.806
100	19	460.060	453.254	-6.806
100	20	458.458	458.858	0.400
100	21	454.455	453.654	-0.801
100	22	458.459	459.259	0.800
100	23	457.658	451.651	-6.007
100	24	456.456	456.056	-0.400
50	36	458.058	457.658	-0.400
50	37	458.058	459.660	1.602
50	38	459.660	455.656	-4.004
50	39	458.058	458.058	0.000
50	40	458.859	456.857	-2.002
30	46	456.456	458.058	1.602
30	47	458.458	459.659	1.201
30	48	461.662	458.458	-3.204
30	49	458.858	459.259	0.401
30	50	457.257	458.459	1.202
10	56	457.658	457.658	0.000
10	57	459.660	459.259	-0.401
10	58	456.456	457.257	0.801
10	59	464.464	463.264	-1.200
10	60	458.459	457.257	-1.202
3	66	458.058	457.658	-0.400
3	67	457.257	457.257	0.000
3	68	457.657	458.058	0.401
3	69	458.459	458.459	0.000
3	70	457.657	457.257	-0.400
0	33	459.660	458.859	-0.801
0	34	459.260	459.260	0.000
0	35	456.857	456.857	0.000
	Max	464.464	463.264	1.602
	Average	458.476	455.940	-2.536
	Min	454.455	450.450	-8.409
	Std Dev	1.508	3.123	3.171



	23.2 __PvinUVLOhys3V					
Test Site	unkins Lab- Dallas					
Tester	TS364/FETS36412					
Test Number	EB588003					
Max Limit	475	mV				
Min Limit	425	mV				
krad(Si)	3	0	10	30	50	100
LL	425.000	425.000	425.000	425.000	425.000	425.000
Min	457.257	456.857	457.257	458.058	455.656	450.450
Average	457.738	458.325	458.939	458.779	457.578	453.508
Max	458.459	459.260	463.264	459.659	459.660	459.259
UL	475.000	475.000	475.000	475.000	475.000	475.000



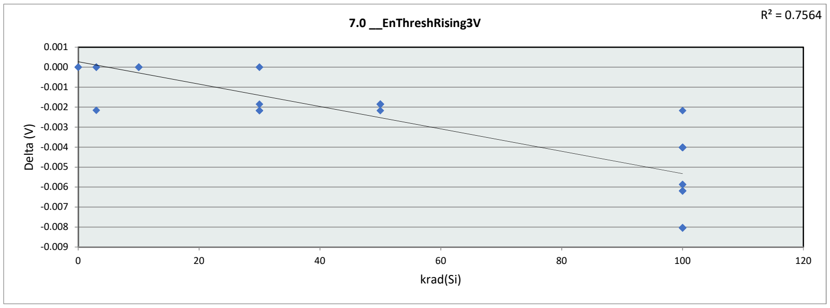
TID/HDR Biased Report

Die lot: 1087518 Exposure date: 11/15/2022

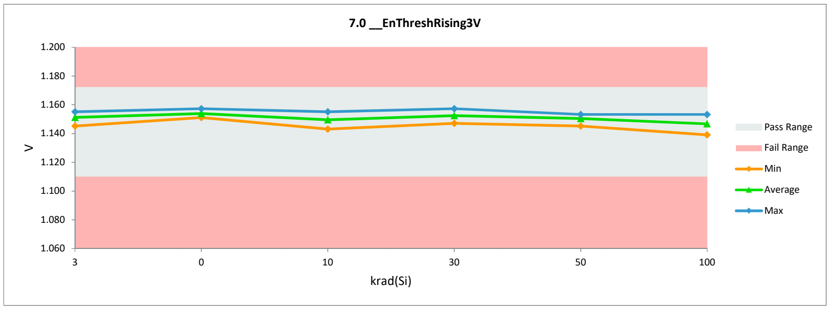
Assy Lot: 2517212

TPS7H4001-SHP

krad(Si)	Serial #	Pre Biased	Post Biased	Delta
		7.0 __EnThreshRising3V		
	Test Site	Junkins Lab- Dalla	Junkins Lab- Dallas	
	Tester	ETS364/FETS3641	ETS364/FETS36412	
	Test Number	EB588003	EB588003	
	Unit	V	V	
	Max Limit	1.172	1.172	
	Min Limit	1.11	1.11	
100	1	1.153	1.147	-0.006
100	2	1.155	1.151	-0.004
100	3	1.149	1.145	-0.004
100	4	1.147	1.139	-0.008
100	5	1.157	1.153	-0.004
100	6	1.149	1.145	-0.004
100	9	1.155	1.149	-0.006
100	10	1.145	1.141	-0.004
100	11	1.153	1.145	-0.008
100	12	1.151	1.147	-0.004
100	13	1.149	1.145	-0.004
100	14	1.153	1.147	-0.006
100	15	1.149	1.143	-0.006
100	16	1.155	1.149	-0.006
100	17	1.149	1.143	-0.006
100	18	1.155	1.147	-0.008
100	19	1.151	1.147	-0.004
100	20	1.157	1.153	-0.004
100	21	1.149	1.145	-0.004
100	22	1.153	1.151	-0.002
100	23	1.153	1.145	-0.008
100	24	1.155	1.147	-0.008
50	36	1.151	1.149	-0.002
50	37	1.155	1.153	-0.002
50	38	1.153	1.151	-0.002
50	39	1.147	1.145	-0.002
50	40	1.155	1.153	-0.002
30	46	1.153	1.153	0.000
30	47	1.155	1.153	-0.002
30	48	1.157	1.157	0.000
30	49	1.149	1.147	-0.002
30	50	1.153	1.151	-0.002
10	56	1.151	1.151	0.000
10	57	1.153	1.153	0.000
10	58	1.143	1.143	0.000
10	59	1.155	1.155	0.000
10	60	1.145	1.145	0.000
3	66	1.157	1.155	-0.002
3	67	1.151	1.151	0.000
3	68	1.153	1.153	0.000
3	69	1.151	1.151	0.000
3	70	1.145	1.145	0.000
0	33	1.157	1.157	0.000
0	34	1.153	1.153	0.000
0	35	1.151	1.151	0.000
	Max	1.157	1.157	0.000
	Average	1.152	1.149	-0.003
	Min	1.143	1.139	-0.008
	Std Dev	0.004	0.004	0.003



	7.0 __EnThreshRising3V					
Test Site	unkins Lab- Dallas					
Tester	TS364/FETS36412					
Test Number	EB588003					
Max Limit	1.172	V				
Min Limit	1.11	V				
krad(Si)	3	0	10	30	50	100
LL	1.110	1.110	1.110	1.110	1.110	1.110
Min	1.145	1.151	1.143	1.147	1.145	1.139
Average	1.151	1.154	1.150	1.152	1.150	1.147
Max	1.155	1.157	1.155	1.157	1.153	1.153
UL	1.172	1.172	1.172	1.172	1.172	1.172



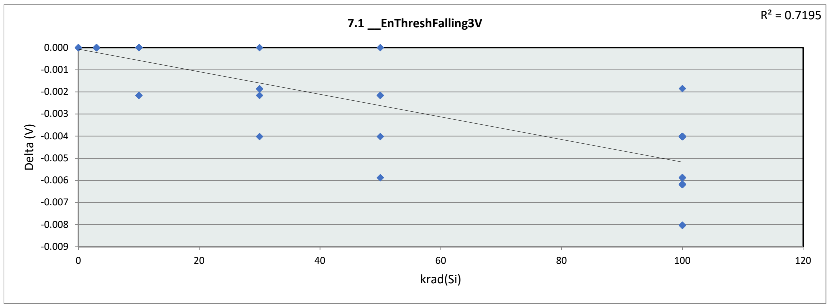
TID/HDR Biased Report

Die lot: 1087518 Exposure date: 11/15/2022

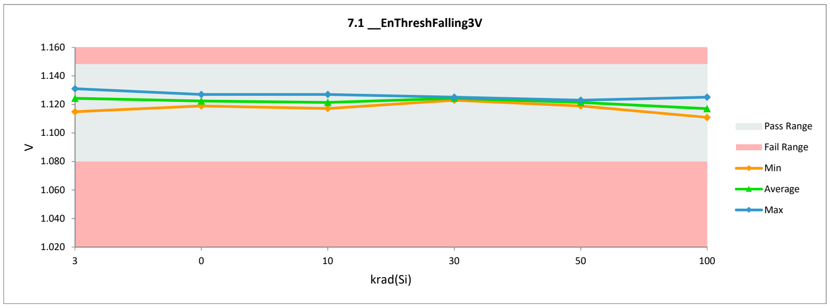
Assy Lot: 2517212

TPS7H4001-SHP

		7.1 __EnThreshFalling3V		
	Test Site	Junkins Lab- Dalla	Junkins Lab- Dallas	
	Tester	ETS364/FETS3641	ETS364/FETS36412	
	Test Number	EB588003	EB588003	
	Unit	V	V	
	Max Limit	1.148	1.148	
	Min Limit	1.08	1.08	
krad(Si)	Serial #	Pre Biased	Post Biased	Delta
100	1	1.119	1.117	-0.002
100	2	1.129	1.123	-0.006
100	3	1.117	1.111	-0.006
100	4	1.117	1.113	-0.004
100	5	1.129	1.125	-0.004
100	6	1.117	1.113	-0.004
100	9	1.123	1.117	-0.006
100	10	1.121	1.115	-0.006
100	11	1.123	1.115	-0.008
100	12	1.127	1.123	-0.004
100	13	1.121	1.113	-0.008
100	14	1.125	1.121	-0.004
100	15	1.119	1.115	-0.004
100	16	1.127	1.121	-0.006
100	17	1.117	1.111	-0.006
100	18	1.121	1.115	-0.006
100	19	1.125	1.121	-0.004
100	20	1.125	1.121	-0.004
100	21	1.119	1.113	-0.006
100	22	1.123	1.119	-0.004
100	23	1.121	1.115	-0.006
100	24	1.121	1.117	-0.004
50	36	1.125	1.123	-0.002
50	37	1.127	1.121	-0.006
50	38	1.125	1.121	-0.004
50	39	1.119	1.119	0.000
50	40	1.125	1.123	-0.002
30	46	1.125	1.123	-0.002
30	47	1.125	1.125	0.000
30	48	1.127	1.123	-0.004
30	49	1.127	1.125	-0.002
30	50	1.127	1.125	-0.002
10	56	1.123	1.123	0.000
10	57	1.127	1.127	0.000
10	58	1.121	1.119	-0.002
10	59	1.121	1.121	0.000
10	60	1.117	1.117	0.000
3	66	1.131	1.131	0.000
3	67	1.125	1.125	0.000
3	68	1.129	1.129	0.000
3	69	1.121	1.121	0.000
3	70	1.115	1.115	0.000
0	33	1.127	1.127	0.000
0	34	1.121	1.121	0.000
0	35	1.119	1.119	0.000
	Max	1.131	1.131	0.000
	Average	1.123	1.120	-0.003
	Min	1.115	1.111	-0.008
	Std Dev	0.004	0.005	0.003



	7.1 __EnThreshFalling3V					
Test Site	unkins Lab- Dallas					
Tester	TS364/FETS36412					
Test Number	EB588003					
Max Limit	1.148	V				
Min Limit	1.08	V				
krad(Si)	3	0	10	30	50	100
LL	1.080	1.080	1.080	1.080	1.080	1.080
Min	1.115	1.119	1.117	1.123	1.119	1.111
Average	1.124	1.122	1.121	1.124	1.121	1.117
Max	1.131	1.127	1.127	1.125	1.123	1.125
UL	1.148	1.148	1.148	1.148	1.148	1.148



TID/HDR Biased Report

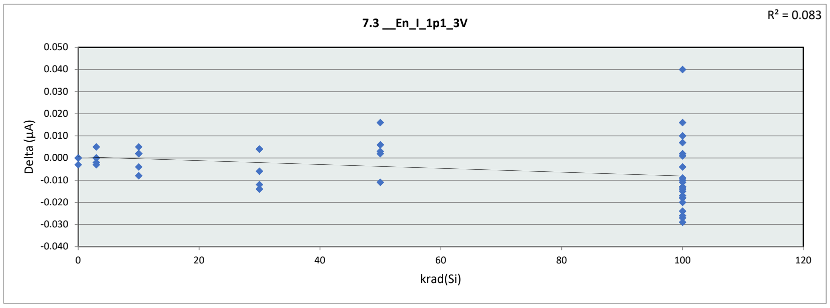
Die lot: 1087518

Exposure date: 11/15/2022

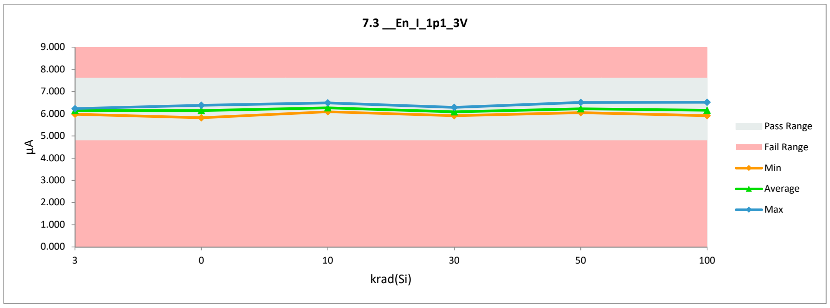
Assy Lot: 2517212

TPS7H4001-SHP

		7.3 __En_I_1p1_3V		
	Test Site	unkins Lab- Dalla	unkins Lab- Dallas	
	Tester	ETS364/FETS3641	ETS364/FETS36412	
	Test Number	EB588003	EB588003	
	Unit	µA	µA	
	Max Limit	7.6	7.6	
	Min Limit	4.8	4.8	
krad(Si)	Serial #	Pre Biased	Post Biased	Delta
100	1	6.342	6.338	-0.004
100	2	6.218	6.207	-0.011
100	3	6.442	6.427	-0.015
100	4	6.253	6.254	0.001
100	5	6.047	6.023	-0.024
100	6	6.203	6.193	-0.010
100	9	6.103	6.077	-0.026
100	10	6.530	6.516	-0.014
100	11	5.939	5.979	0.040
100	12	6.068	6.039	-0.029
100	13	6.225	6.232	0.007
100	14	5.937	5.917	-0.020
100	15	6.100	6.073	-0.027
100	16	5.947	5.957	0.010
100	17	6.250	6.232	-0.018
100	18	5.975	5.958	-0.017
100	19	5.962	5.949	-0.013
100	20	6.147	6.138	-0.009
100	21	6.064	6.046	-0.018
100	22	6.146	6.148	0.002
100	23	6.435	6.422	-0.013
100	24	6.296	6.312	0.016
50	36	6.511	6.513	0.002
50	37	6.038	6.054	0.016
50	38	6.063	6.069	0.006
50	39	6.242	6.245	0.003
50	40	6.254	6.243	-0.011
30	46	6.036	6.030	-0.006
30	47	5.984	5.970	-0.014
30	48	6.285	6.289	0.004
30	49	6.231	6.235	0.004
30	50	5.923	5.911	-0.012
10	56	6.115	6.117	0.002
10	57	6.086	6.091	0.005
10	58	6.494	6.490	-0.004
10	59	6.280	6.272	-0.008
10	60	6.361	6.363	0.002
3	66	6.211	6.211	0.000
3	67	6.187	6.187	0.000
3	68	5.978	5.976	-0.002
3	69	6.154	6.159	0.005
3	70	6.236	6.233	-0.003
0	33	5.822	5.819	-0.003
0	34	6.381	6.381	0.000
0	35	6.232	6.232	0.000
	Max	6.530	6.516	0.040
	Average	6.172	6.167	-0.005
	Min	5.822	5.819	-0.029
	Std Dev	0.171	0.172	0.013



	7.3 __En_I_1p1_3V					
Test Site	unkins Lab- Dallas					
Tester	TS364/FETS36412					
Test Number	EB588003					
Max Limit	7.6	µA				
Min Limit	4.8	µA				
krad(Si)	3	0	10	30	50	100
LL	4.800	4.800	4.800	4.800	4.800	4.800
Min	5.976	5.819	6.091	5.911	6.054	5.917
Average	6.153	6.144	6.267	6.087	6.225	6.156
Max	6.233	6.381	6.490	6.289	6.513	6.516
UL	7.600	7.600	7.600	7.600	7.600	7.600



TID/HDR Biased Report

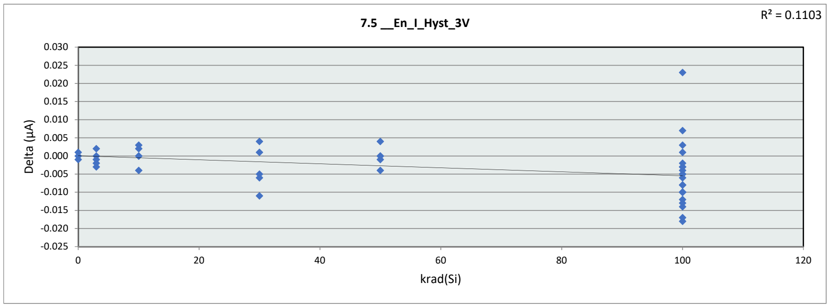
Die lot: 1087518

Exposure date: 11/15/2022

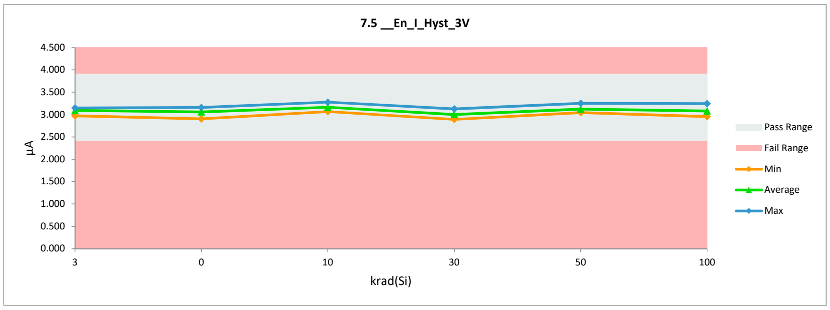
Assy Lot: 2517212

TPS7H4001-SHP

		7.5 __En_I_Hyst_3V		
	Test Site	Junkins Lab- Dalla	Junkins Lab- Dallas	
	Tester	ETS364/FETS3641	ETS364/FETS36412	
	Test Number	EB588003	EB588003	
	Unit	µA	µA	
	Max Limit	3.9	3.9	
	Min Limit	2.4	2.4	
krad(Si)	Serial #	Pre Biased	Post Biased	Delta
100	1	3.153	3.150	-0.003
100	2	3.117	3.112	-0.005
100	3	3.242	3.232	-0.010
100	4	3.091	3.092	0.001
100	5	3.027	3.017	-0.010
100	6	3.068	3.065	-0.003
100	9	3.015	2.997	-0.018
100	10	3.192	3.179	-0.013
100	11	3.020	3.043	0.023
100	12	3.047	3.037	-0.010
100	13	3.146	3.144	-0.002
100	14	2.962	2.954	-0.008
100	15	3.019	3.002	-0.017
100	16	2.978	2.981	0.003
100	17	3.174	3.160	-0.014
100	18	3.002	2.992	-0.010
100	19	2.982	2.976	-0.006
100	20	3.085	3.081	-0.004
100	21	3.032	3.020	-0.012
100	22	3.062	3.057	-0.005
100	23	3.252	3.244	-0.008
100	24	3.155	3.162	0.007
50	36	3.252	3.252	0.000
50	37	3.040	3.044	0.004
50	38	3.068	3.068	0.000
50	39	3.094	3.093	-0.001
50	40	3.162	3.158	-0.004
30	46	2.925	2.919	-0.006
30	47	2.951	2.940	-0.011
30	48	3.125	3.126	0.001
30	49	3.114	3.118	0.004
30	50	2.896	2.891	-0.005
10	56	3.112	3.112	0.000
10	57	3.064	3.066	0.002
10	58	3.277	3.277	0.000
10	59	3.150	3.146	-0.004
10	60	3.210	3.213	0.003
3	66	3.087	3.087	0.000
3	67	3.150	3.148	-0.002
3	68	2.971	2.970	-0.001
3	69	3.136	3.138	0.002
3	70	3.118	3.115	-0.003
0	33	2.904	2.904	0.000
0	34	3.160	3.159	-0.001
0	35	3.106	3.107	0.001
	Max	3.277	3.277	0.023
	Average	3.087	3.083	-0.003
	Min	2.896	2.891	-0.018
	Std Dev	0.094	0.095	0.007



	7.5 __En_I_Hyst_3V					
Test Site	unkins Lab- Dallas					
Tester	TS364/FETS36412					
Test Number	EB588003					
Max Limit	3.9	µA				
Min Limit	2.4	µA				
krad(Si)	3	0	10	30	50	100
LL	2.400	2.400	2.400	2.400	2.400	2.400
Min	2.970	2.904	3.066	2.891	3.044	2.954
Average	3.092	3.057	3.163	2.999	3.123	3.077
Max	3.148	3.159	3.277	3.126	3.252	3.244
UL	3.900	3.900	3.900	3.900	3.900	3.900



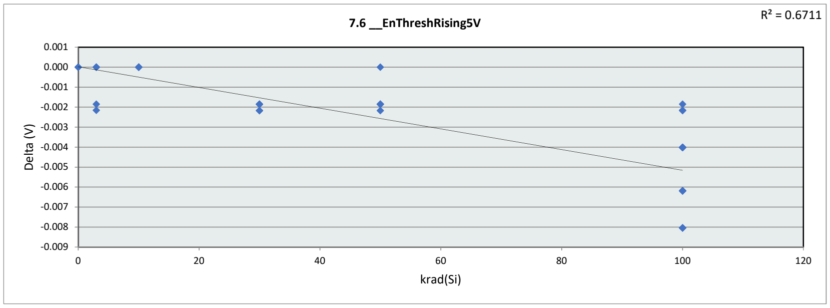
TID/HDR Biased Report

Die lot: 1087518 Exposure date: 11/15/2022

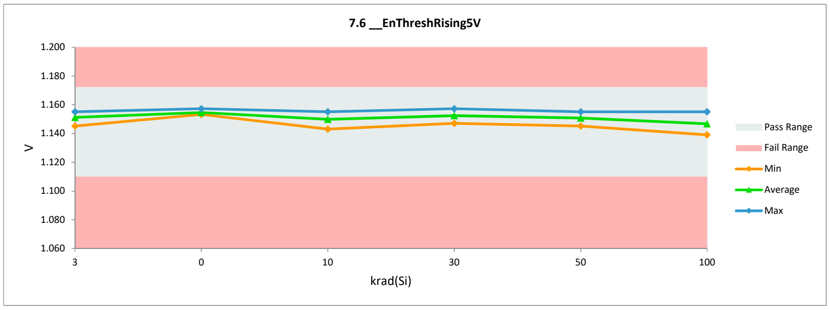
Assy Lot: 2517212

TPS7H4001-SHP

		7.6 __EnThreshRising5V		
	Test Site	Junkins Lab- Dalla	Junkins Lab- Dallas	
	Tester	ETS364/FETS3641	ETS364/FETS36412	
	Test Number	EB588003	EB588003	
	Unit	V	V	
	Max Limit	1.172	1.172	
	Min Limit	1.11	1.11	
krad(Si)	Serial #	Pre Biased	Post Biased	Delta
100	1	1.153	1.147	-0.006
100	2	1.155	1.151	-0.004
100	3	1.149	1.145	-0.004
100	4	1.145	1.139	-0.006
100	5	1.157	1.153	-0.004
100	6	1.149	1.145	-0.004
100	9	1.155	1.147	-0.008
100	10	1.145	1.141	-0.004
100	11	1.153	1.145	-0.008
100	12	1.151	1.147	-0.004
100	13	1.149	1.145	-0.004
100	14	1.153	1.147	-0.006
100	15	1.149	1.143	-0.006
100	16	1.157	1.151	-0.006
100	17	1.149	1.143	-0.006
100	18	1.155	1.147	-0.008
100	19	1.149	1.147	-0.002
100	20	1.157	1.155	-0.002
100	21	1.147	1.145	-0.002
100	22	1.155	1.151	-0.004
100	23	1.153	1.145	-0.008
100	24	1.155	1.147	-0.008
50	36	1.151	1.149	-0.002
50	37	1.155	1.155	0.000
50	38	1.153	1.151	-0.002
50	39	1.147	1.145	-0.002
50	40	1.155	1.153	-0.002
30	46	1.155	1.153	-0.002
30	47	1.155	1.153	-0.002
30	48	1.159	1.157	-0.002
30	49	1.149	1.147	-0.002
30	50	1.153	1.151	-0.002
10	56	1.151	1.151	0.000
10	57	1.155	1.155	0.000
10	58	1.143	1.143	0.000
10	59	1.155	1.155	0.000
10	60	1.145	1.145	0.000
3	66	1.157	1.155	-0.002
3	67	1.153	1.153	0.000
3	68	1.153	1.153	0.000
3	69	1.151	1.149	-0.002
3	70	1.145	1.145	0.000
0	33	1.157	1.157	0.000
0	34	1.153	1.153	0.000
0	35	1.153	1.153	0.000
	Max	1.159	1.157	0.000
	Average	1.152	1.149	-0.003
	Min	1.143	1.139	-0.008
	Std Dev	0.004	0.005	0.003



	7.6 __EnThreshRising5V					
Test Site	unkins Lab- Dallas					
Tester	TS364/FETS36412					
Test Number	EB588003					
Max Limit	1.172	V				
Min Limit	1.11	V				
krad(Si)	3	0	10	30	50	100
LL	1.110	1.110	1.110	1.110	1.110	1.110
Min	1.145	1.153	1.143	1.147	1.145	1.139
Average	1.151	1.155	1.150	1.152	1.151	1.147
Max	1.155	1.157	1.155	1.157	1.155	1.155
UL	1.172	1.172	1.172	1.172	1.172	1.172



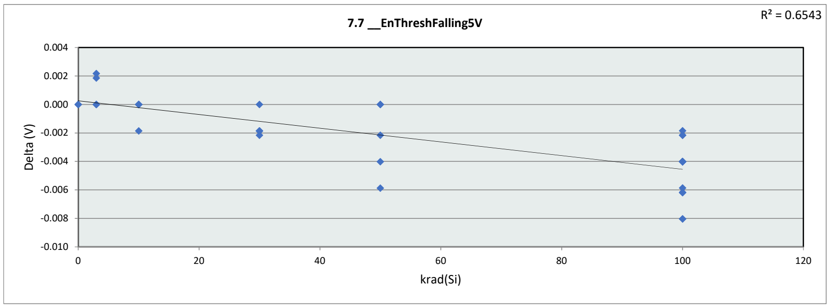
TID/HDR Biased Report

Die lot: 1087518 Exposure date: 11/15/2022

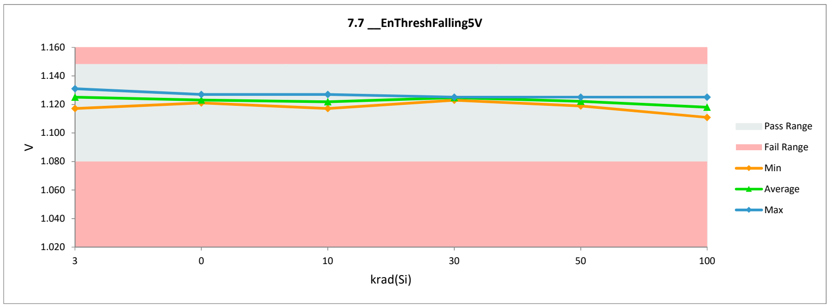
Assy Lot: 2517212

TPS7H4001-SHP

		7.7 __EnThreshFalling5V		
	Test Site	Junkins Lab- Dalla	Junkins Lab- Dallas	
	Tester	ETS364/FETS3641	ETS364/FETS36412	
	Test Number	EB588003	EB588003	
	Unit	V	V	
	Max Limit	1.148	1.148	
	Min Limit	1.08	1.08	
krad(Si)	Serial #	Pre Biased	Post Biased	Delta
100	1	1.121	1.119	-0.002
100	2	1.129	1.123	-0.006
100	3	1.117	1.113	-0.004
100	4	1.117	1.113	-0.004
100	5	1.129	1.125	-0.004
100	6	1.119	1.115	-0.004
100	9	1.123	1.119	-0.004
100	10	1.121	1.115	-0.006
100	11	1.123	1.115	-0.008
100	12	1.127	1.123	-0.004
100	13	1.123	1.115	-0.008
100	14	1.125	1.121	-0.004
100	15	1.119	1.117	-0.002
100	16	1.127	1.123	-0.004
100	17	1.117	1.111	-0.006
100	18	1.121	1.117	-0.004
100	19	1.125	1.121	-0.004
100	20	1.127	1.123	-0.004
100	21	1.119	1.113	-0.006
100	22	1.123	1.119	-0.004
100	23	1.121	1.117	-0.004
100	24	1.121	1.119	-0.002
50	36	1.125	1.125	0.000
50	37	1.127	1.123	-0.004
50	38	1.127	1.121	-0.006
50	39	1.119	1.119	0.000
50	40	1.125	1.123	-0.002
30	46	1.125	1.123	-0.002
30	47	1.125	1.125	0.000
30	48	1.127	1.125	-0.002
30	49	1.127	1.125	-0.002
30	50	1.127	1.125	-0.002
10	56	1.123	1.123	0.000
10	57	1.127	1.127	0.000
10	58	1.121	1.121	0.000
10	59	1.123	1.121	-0.002
10	60	1.117	1.117	0.000
3	66	1.131	1.131	0.000
3	67	1.125	1.125	0.000
3	68	1.129	1.129	0.000
3	69	1.121	1.123	0.002
3	70	1.115	1.117	0.002
0	33	1.127	1.127	0.000
0	34	1.121	1.121	0.000
0	35	1.121	1.121	0.000
	Max	1.131	1.131	0.002
	Average	1.123	1.121	-0.003
	Min	1.115	1.111	-0.008
	Std Dev	0.004	0.005	0.003



	7.7 __EnThreshFalling5V					
Test Site	unkins Lab- Dallas					
Tester	TS364/FETS36412					
Test Number	EB588003					
Max Limit	1.148	V				
Min Limit	1.08	V				
krad(Si)	3	0	10	30	50	100
LL	1.080	1.080	1.080	1.080	1.080	1.080
Min	1.117	1.121	1.117	1.123	1.119	1.111
Average	1.125	1.123	1.122	1.125	1.122	1.118
Max	1.131	1.127	1.127	1.125	1.125	1.125
UL	1.148	1.148	1.148	1.148	1.148	1.148



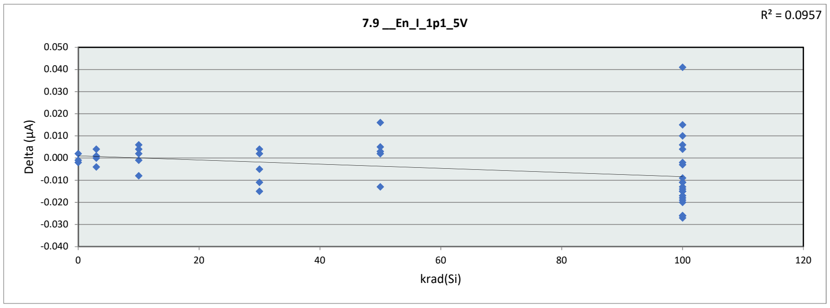
TID/HDR Biased Report

Die lot: 1087518 Exposure date: 11/15/2022

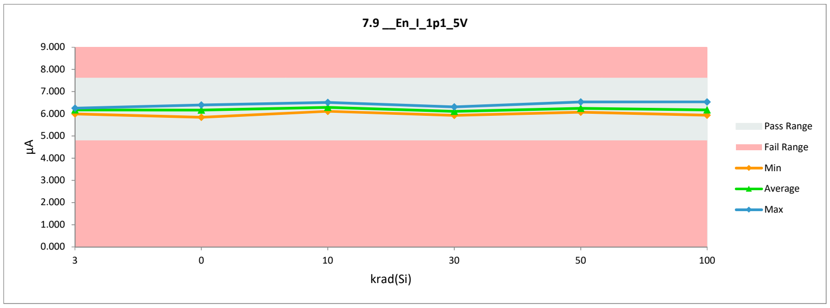
Assy Lot: 2517212

TPS7H4001-SHP

		7.9 __En_I_1p1_5V		
	Test Site	Junkins Lab- Dalla	Junkins Lab- Dallas	
	Tester	ETS364/FETS3641	ETS364/FETS36412	
	Test Number	EB588003	EB588003	
	Unit	μA	μA	
	Max Limit	7.6	7.6	
	Min Limit	4.8	4.8	
krad(Si)	Serial #	Pre Biased	Post Biased	Delta
100	1	6.362	6.359	-0.003
100	2	6.237	6.226	-0.011
100	3	6.460	6.445	-0.015
100	4	6.273	6.271	-0.002
100	5	6.067	6.041	-0.026
100	6	6.224	6.213	-0.011
100	9	6.123	6.096	-0.027
100	10	6.550	6.535	-0.015
100	11	5.957	5.998	0.041
100	12	6.086	6.060	-0.026
100	13	6.244	6.250	0.006
100	14	5.955	5.935	-0.020
100	15	6.119	6.093	-0.026
100	16	5.966	5.976	0.010
100	17	6.269	6.251	-0.018
100	18	5.994	5.977	-0.017
100	19	5.981	5.968	-0.013
100	20	6.166	6.157	-0.009
100	21	6.084	6.065	-0.019
100	22	6.164	6.168	0.004
100	23	6.455	6.441	-0.014
100	24	6.317	6.332	0.015
50	36	6.530	6.533	0.003
50	37	6.057	6.073	0.016
50	38	6.082	6.087	0.005
50	39	6.262	6.264	0.002
50	40	6.274	6.261	-0.013
30	46	6.053	6.048	-0.005
30	47	6.004	5.989	-0.015
30	48	6.306	6.308	0.002
30	49	6.251	6.255	0.004
30	50	5.941	5.930	-0.011
10	56	6.134	6.136	0.002
10	57	6.105	6.111	0.006
10	58	6.511	6.510	-0.001
10	59	6.299	6.291	-0.008
10	60	6.378	6.382	0.004
3	66	6.230	6.230	0.000
3	67	6.206	6.207	0.001
3	68	5.995	5.995	0.000
3	69	6.172	6.176	0.004
3	70	6.258	6.254	-0.004
0	33	5.841	5.840	-0.001
0	34	6.401	6.399	-0.002
0	35	6.250	6.252	0.002
	Max	6.550	6.535	0.041
	Average	6.191	6.186	-0.005
	Min	5.841	5.840	-0.027
	Std Dev	0.171	0.172	0.013



	7.9 __En_I_1p1_5V					
Test Site	unkins Lab- Dallas					
Tester	TS364/FETS36412					
Test Number	EB588003					
Max Limit	7.6	μA				
Min Limit	4.8	μA				
krad(Si)	3	0	10	30	50	100
LL	4.800	4.800	4.800	4.800	4.800	4.800
Min	5.995	5.840	6.111	5.930	6.073	5.935
Average	6.172	6.164	6.286	6.106	6.244	6.175
Max	6.254	6.399	6.510	6.308	6.533	6.535
UL	7.600	7.600	7.600	7.600	7.600	7.600



TID/HDR Biased Report

Die lot: 1087518

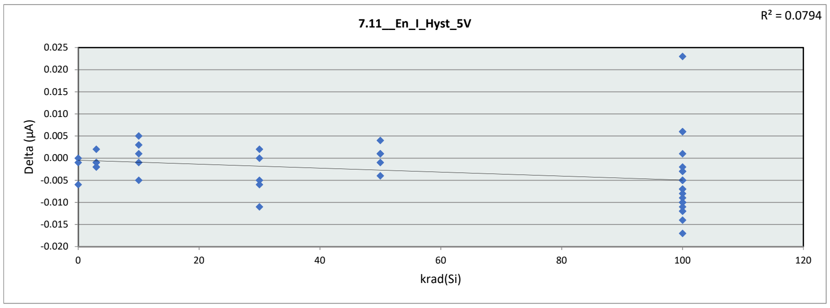
Exposure date: 11/15/2022

Assy Lot: 2517212

TPS7H4001-SHP

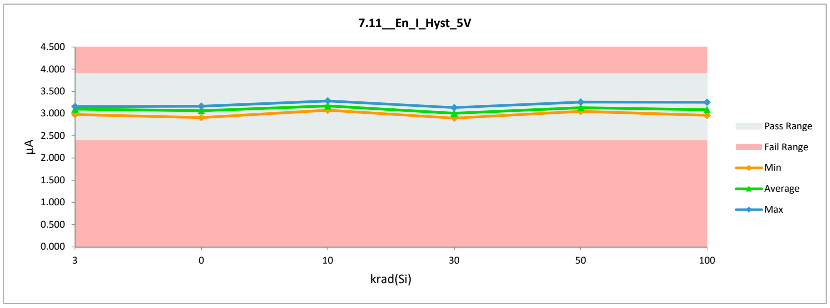
	7.11__En_I_Hyst_5V	
Test Site	Junkins Lab- Dalla	Junkins Lab- Dallas
Tester	ETS364/FETS3641	ETS364/FETS36412
Test Number	EB588003	EB588003
Unit	µA	µA
Max Limit	3.9	3.9
Min Limit	2.4	2.4

krad(Si)	Serial #	Pre Biased	Post Biased	Delta
100	1	3.163	3.160	-0.003
100	2	3.126	3.121	-0.005
100	3	3.252	3.242	-0.010
100	4	3.100	3.101	0.001
100	5	3.034	3.025	-0.009
100	6	3.077	3.075	-0.002
100	9	3.024	3.007	-0.017
100	10	3.202	3.190	-0.012
100	11	3.029	3.052	0.023
100	12	3.057	3.047	-0.010
100	13	3.156	3.153	-0.003
100	14	2.972	2.962	-0.010
100	15	3.026	3.012	-0.014
100	16	2.987	2.993	0.006
100	17	3.183	3.171	-0.012
100	18	3.009	3.002	-0.007
100	19	2.992	2.985	-0.007
100	20	3.095	3.090	-0.005
100	21	3.041	3.030	-0.011
100	22	3.073	3.068	-0.005
100	23	3.263	3.255	-0.008
100	24	3.166	3.172	0.006
50	36	3.261	3.262	0.001
50	37	3.049	3.053	0.004
50	38	3.077	3.078	0.001
50	39	3.105	3.104	-0.001
50	40	3.172	3.168	-0.004
30	46	2.931	2.926	-0.005
30	47	2.960	2.949	-0.011
30	48	3.136	3.136	0.000
30	49	3.125	3.127	0.002
30	50	2.905	2.899	-0.006
10	56	3.121	3.122	0.001
10	57	3.072	3.077	0.005
10	58	3.286	3.285	-0.001
10	59	3.161	3.156	-0.005
10	60	3.221	3.224	0.003
3	66	3.098	3.096	-0.002
3	67	3.159	3.158	-0.001
3	68	2.981	2.980	-0.001
3	69	3.144	3.146	0.002
3	70	3.128	3.126	-0.002
0	33	2.917	2.911	-0.006
0	34	3.168	3.168	0.000
0	35	3.116	3.115	-0.001
	Max	3.286	3.285	0.023
	Average	3.096	3.093	-0.003
	Min	2.905	2.899	-0.017
	Std Dev	0.094	0.095	0.007



	7.11__En_I_Hyst_5V	
Test Site	unkins Lab- Dallas	
Tester	TS364/FETS36412	
Test Number	EB588003	
Max Limit	3.9	µA
Min Limit	2.4	µA

krad(Si)	3	0	10	30	50	100
LL	2.400	2.400	2.400	2.400	2.400	2.400
Min	2.980	2.911	3.077	2.899	3.053	2.962
Average	3.101	3.065	3.173	3.007	3.133	3.087
Max	3.158	3.168	3.285	3.136	3.262	3.255
UL	3.900	3.900	3.900	3.900	3.900	3.900



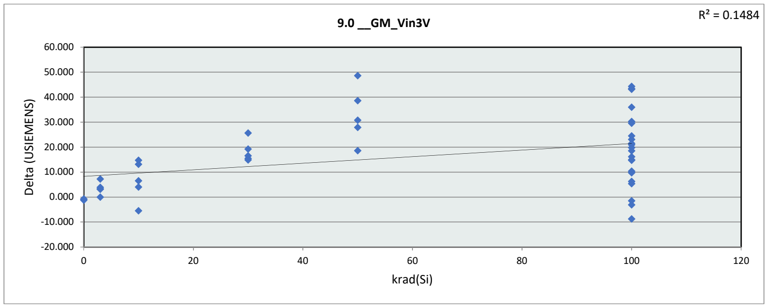
TID/HDR Biased Report

Die lot: 1087518 Exposure date: 11/15/2022

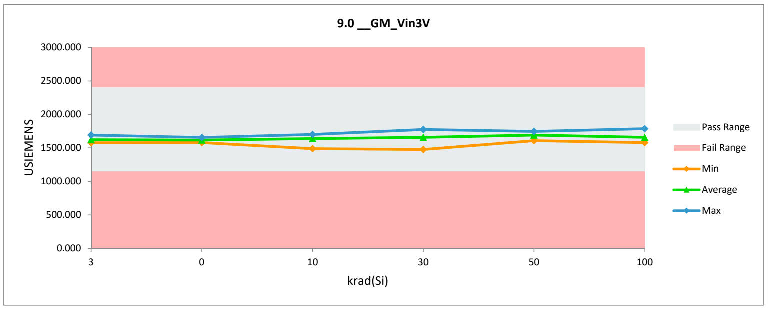
Assy Lot: 2517212

TPS7H4001-SHP

		9.0 __GM_Vin3V		
	Test Site	Junkins Lab- Dalla	Junkins Lab- Dallas	
	Tester	ETS364/FETS3641	ETS364/FETS36412	
	Test Number	EB588003	EB588003	
	Unit	USIEMENS	USIEMENS	
	Max Limit	2400	2400	
	Min Limit	1150	1150	
krad(Si)	Serial #	Pre Biased	Post Biased	Delta
100	1	1754.032	1775.514	21.482
100	2	1596.384	1619.476	23.092
100	3	1729.020	1745.133	16.113
100	4	1578.261	1602.724	24.463
100	5	1671.644	1682.016	10.372
100	6	1626.737	1641.645	14.908
100	9	1578.416	1599.359	20.943
100	10	1697.394	1688.649	-8.745
100	11	1587.133	1601.878	14.745
100	12	1620.795	1617.694	-3.101
100	13	1550.309	1580.585	30.276
100	14	1751.657	1787.642	35.985
100	15	1629.246	1672.386	43.140
100	16	1631.787	1638.068	6.281
100	17	1632.466	1676.764	44.298
100	18	1555.984	1585.521	29.537
100	19	1613.838	1633.630	19.792
100	20	1701.682	1720.165	18.483
100	21	1687.422	1692.802	5.380
100	22	1622.944	1632.686	9.742
100	23	1649.432	1647.943	-1.489
100	24	1602.935	1646.310	43.375
50	36	1719.789	1747.671	27.882
50	37	1685.448	1734.074	48.626
50	38	1570.389	1608.996	38.607
50	39	1638.782	1669.576	30.794
50	40	1677.249	1695.801	18.552
30	46	1683.614	1698.482	14.868
30	47	1583.452	1598.896	15.444
30	48	1712.272	1737.914	25.642
30	49	1758.594	1775.090	16.496
30	50	1457.912	1477.107	19.195
10	56	1694.804	1701.304	6.500
10	57	1643.900	1658.643	14.743
10	58	1652.965	1656.957	3.992
10	59	1694.976	1689.483	-5.493
10	60	1475.600	1488.700	13.100
3	66	1573.779	1576.871	3.092
3	67	1623.968	1627.270	3.302
3	68	1626.480	1633.677	7.197
3	69	1687.912	1691.808	3.896
3	70	1583.172	1583.118	-0.054
0	33	1657.889	1657.021	-0.868
0	34	1580.837	1580.105	-0.732
0	35	1619.969	1618.747	-1.222
	Max	1758.594	1787.642	48.626
	Average	1637.184	1653.242	16.058
	Min	1457.912	1477.107	-8.745
	Std Dev	66.407	67.458	14.506



	9.0 __GM_Vin3V					
Test Site	unkins Lab- Dallas					
Tester	TS364/FETS36412					
Test Number	EB588003					
Max Limit	2400	USIEMENS				
Min Limit	1150	USIEMENS				
krad(Si)	3	0	10	30	50	100
LL	1150.000	1150.000	1150.000	1150.000	1150.000	1150.000
Min	1576.871	1580.105	1488.700	1477.107	1608.996	1580.585
Average	1622.549	1618.624	1639.017	1657.498	1691.224	1658.572
Max	1691.808	1657.021	1701.304	1775.090	1747.671	1787.642
UL	2400.000	2400.000	2400.000	2400.000	2400.000	2400.000



TID/HDR Biased Report

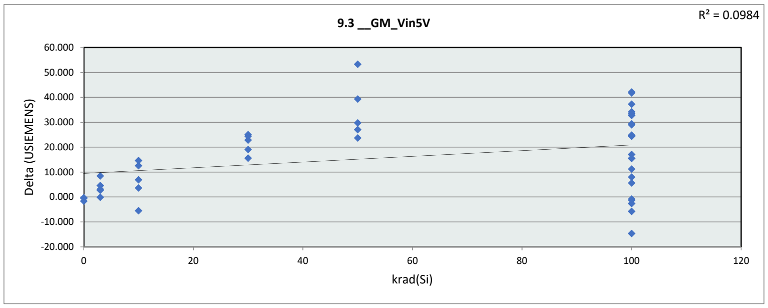
Die lot: 1087518

Exposure date: 11/15/2022

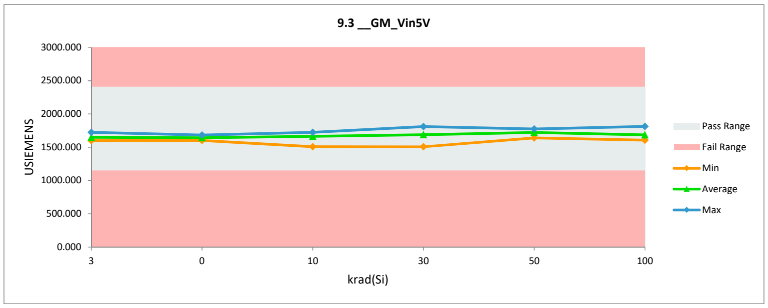
Assy Lot: 2517212

TPS7H4001-SHP

		9.3 __GM_Vin5V		
	Test Site	Junkins Lab- Dalla	Junkins Lab- Dallas	
	Tester	ETS364/FETS3641	ETS364/FETS36412	
	Test Number	EB588003	EB588003	
	Unit	USIEMENS	USIEMENS	
	Max Limit	2400	2400	
	Min Limit	1150	1150	
krad(Si)	Serial #	Pre Biased	Post Biased	Delta
100	1	1788.394	1803.924	15.530
100	2	1623.842	1640.895	17.053
100	3	1763.927	1779.481	15.554
100	4	1600.779	1633.559	32.780
100	5	1706.680	1705.896	-0.784
100	6	1658.707	1669.916	11.209
100	9	1605.668	1630.546	24.878
100	10	1726.271	1711.612	-14.659
100	11	1610.022	1634.453	24.431
100	12	1641.710	1647.337	5.627
100	13	1581.153	1605.781	24.628
100	14	1774.912	1812.175	37.263
100	15	1663.231	1705.005	41.774
100	16	1663.304	1660.679	-2.625
100	17	1664.464	1698.609	34.145
100	18	1578.227	1611.650	33.423
100	19	1636.375	1665.351	28.976
100	20	1724.989	1754.353	29.364
100	21	1720.293	1714.525	-5.768
100	22	1655.766	1654.513	-1.253
100	23	1672.609	1680.619	8.010
100	24	1625.173	1667.330	42.157
50	36	1748.148	1775.213	27.065
50	37	1714.974	1768.215	53.241
50	38	1600.837	1640.153	39.316
50	39	1667.534	1697.298	29.764
50	40	1706.339	1730.032	23.693
30	46	1705.544	1730.592	25.048
30	47	1606.239	1621.805	15.566
30	48	1746.517	1770.900	24.383
30	49	1788.068	1810.948	22.880
30	50	1487.957	1507.039	19.082
10	56	1717.383	1724.292	6.909
10	57	1665.524	1680.176	14.652
10	58	1686.474	1690.111	3.637
10	59	1727.942	1722.451	-5.491
10	60	1495.705	1508.255	12.550
3	66	1595.563	1598.669	3.106
3	67	1657.108	1659.853	2.745
3	68	1647.573	1656.044	8.471
3	69	1720.585	1725.194	4.609
3	70	1604.721	1604.604	-0.117
0	33	1684.192	1683.909	-0.283
0	34	1602.348	1600.728	-1.620
0	35	1642.204	1641.743	-0.461
	Max	1788.394	1812.175	53.241
	Average	1664.577	1680.810	16.232
	Min	1487.957	1507.039	-14.659
	Std Dev	68.310	69.408	15.577



	9.3 __GM_Vin5V					
Test Site	unkins Lab- Dallas					
Tester	TS364/FETS36412					
Test Number	EB588003					
Max Limit	2400	USIEMENS				
Min Limit	1150	USIEMENS				
krad(Si)	3	0	10	30	50	100
LL	1150.000	1150.000	1150.000	1150.000	1150.000	1150.000
Min	1598.669	1600.728	1508.255	1507.039	1640.153	1605.781
Average	1648.873	1642.127	1665.057	1688.257	1722.182	1685.828
Max	1725.194	1683.909	1724.292	1810.948	1775.213	1812.175
UL	2400.000	2400.000	2400.000	2400.000	2400.000	2400.000



TID/HDR Biased Report

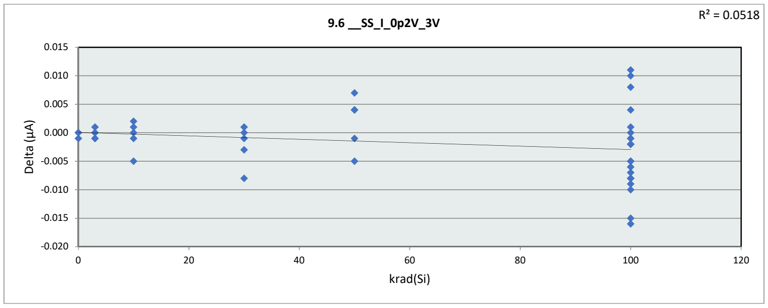
Die lot: 1087518

Exposure date: 11/15/2022

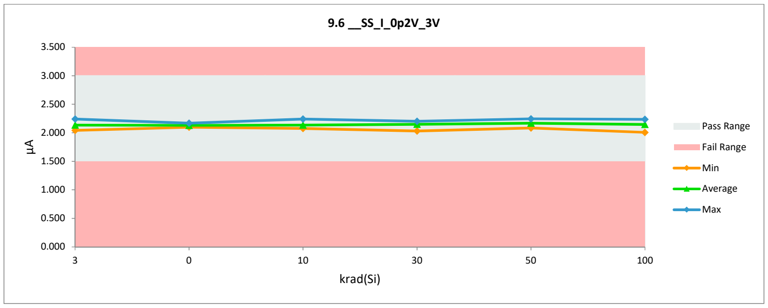
Assy Lot: 2517212

TPS7H4001-SHP

		9.6 __SS_I_0p2V_3V		
	Test Site	Junkins Lab- Dalla	Junkins Lab- Dallas	
	Tester	ETS364/FETS3641	ETS364/FETS36412	
	Test Number	EB588003	EB588003	
	Unit	µA	µA	
	Max Limit	3	3	
	Min Limit	1.5	1.5	
krad(Si)	Serial #	Pre Biased	Post Biased	Delta
100	1	2.231	2.229	-0.002
100	2	2.139	2.138	-0.001
100	3	2.187	2.198	0.011
100	4	2.160	2.152	-0.008
100	5	2.094	2.078	-0.016
100	6	2.193	2.191	-0.002
100	9	2.092	2.084	-0.008
100	10	2.199	2.191	-0.008
100	11	2.180	2.190	0.010
100	12	2.125	2.115	-0.010
100	13	2.143	2.144	0.001
100	14	2.158	2.153	-0.005
100	15	2.073	2.067	-0.006
100	16	2.185	2.170	-0.015
100	17	2.198	2.198	0.000
100	18	2.097	2.096	-0.001
100	19	2.084	2.092	0.008
100	20	2.012	2.007	-0.005
100	21	2.119	2.112	-0.007
100	22	2.165	2.163	-0.002
100	23	2.229	2.220	-0.009
100	24	2.231	2.235	0.004
50	36	2.238	2.245	0.007
50	37	2.080	2.084	0.004
50	38	2.189	2.188	-0.001
50	39	2.176	2.180	0.004
50	40	2.147	2.142	-0.005
30	46	2.035	2.032	-0.003
30	47	2.209	2.201	-0.008
30	48	2.187	2.186	-0.001
30	49	2.152	2.153	0.001
30	50	2.170	2.170	0.000
10	56	2.242	2.241	-0.001
10	57	2.159	2.159	0.000
10	58	2.109	2.111	0.002
10	59	2.094	2.089	-0.005
10	60	2.075	2.076	0.001
3	66	2.041	2.041	0.000
3	67	2.224	2.223	-0.001
3	68	2.240	2.240	0.000
3	69	2.060	2.061	0.001
3	70	2.112	2.111	-0.001
0	33	2.169	2.168	-0.001
0	34	2.097	2.097	0.000
0	35	2.126	2.126	0.000
	Max	2.242	2.245	0.011
	Average	2.147	2.145	-0.002
	Min	2.012	2.007	-0.016
	Std Dev	0.060	0.061	0.006



	9.6 __SS_I_0p2V_3V					
Test Site	unkins Lab- Dallas					
Tester	TS364/FETS36412					
Test Number	EB588003					
Max Limit	3	µA				
Min Limit	1.5	µA				
krad(Si)	3	0	10	30	50	100
LL	1.500	1.500	1.500	1.500	1.500	1.500
Min	2.041	2.097	2.076	2.032	2.084	2.007
Average	2.135	2.130	2.135	2.148	2.168	2.147
Max	2.240	2.168	2.241	2.201	2.245	2.235
UL	3.000	3.000	3.000	3.000	3.000	3.000



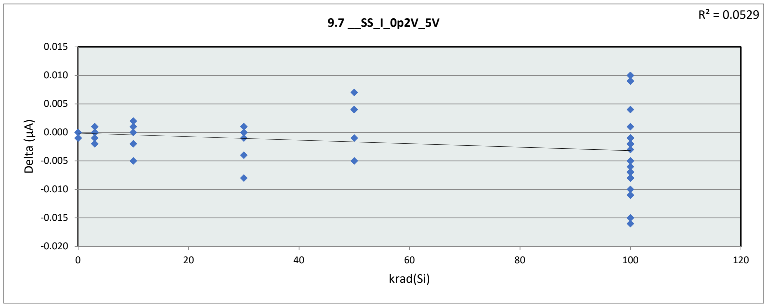
TID/HDR Biased Report

Die lot: 1087518 Exposure date: 11/15/2022

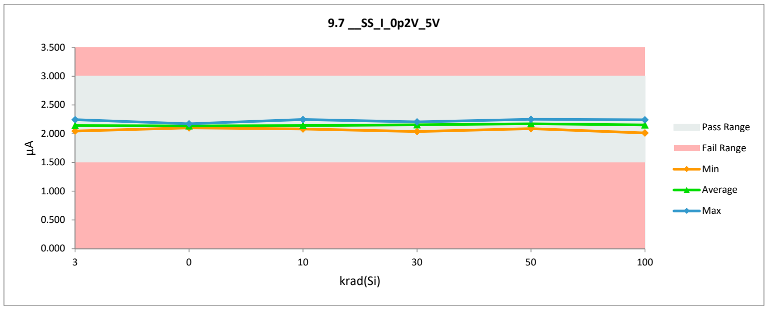
Assy Lot: 2517212

TPS7H4001-SHP

		9.7 __SS_I_0p2V_5V		
	Test Site	Junkins Lab- Dalla	Junkins Lab- Dallas	
	Tester	ETS364/FETS36412	ETS364/FETS36412	
	Test Number	EB588003	EB588003	
	Unit	µA	µA	
	Max Limit	3	3	
	Min Limit	1.5	1.5	
krad(Si)	Serial #	Pre Biased	Post Biased	Delta
100	1	2.236	2.234	-0.002
100	2	2.145	2.143	-0.002
100	3	2.193	2.203	0.010
100	4	2.165	2.158	-0.007
100	5	2.099	2.083	-0.016
100	6	2.199	2.196	-0.003
100	9	2.097	2.089	-0.008
100	10	2.205	2.197	-0.008
100	11	2.186	2.196	0.010
100	12	2.131	2.120	-0.011
100	13	2.148	2.149	0.001
100	14	2.163	2.158	-0.005
100	15	2.080	2.073	-0.007
100	16	2.190	2.175	-0.015
100	17	2.204	2.203	-0.001
100	18	2.102	2.101	-0.001
100	19	2.089	2.098	0.009
100	20	2.018	2.012	-0.006
100	21	2.125	2.118	-0.007
100	22	2.170	2.168	-0.002
100	23	2.235	2.225	-0.010
100	24	2.237	2.241	0.004
50	36	2.244	2.251	0.007
50	37	2.085	2.089	0.004
50	38	2.195	2.194	-0.001
50	39	2.181	2.185	0.004
50	40	2.152	2.147	-0.005
30	46	2.041	2.037	-0.004
30	47	2.214	2.206	-0.008
30	48	2.192	2.191	-0.001
30	49	2.158	2.159	0.001
30	50	2.176	2.176	0.000
10	56	2.248	2.246	-0.002
10	57	2.164	2.164	0.000
10	58	2.114	2.116	0.002
10	59	2.099	2.094	-0.005
10	60	2.081	2.082	0.001
3	66	2.046	2.046	0.000
3	67	2.229	2.229	0.000
3	68	2.246	2.245	-0.001
3	69	2.065	2.066	0.001
3	70	2.118	2.116	-0.002
0	33	2.174	2.173	-0.001
0	34	2.103	2.102	-0.001
0	35	2.131	2.131	0.000
	Max	2.248	2.251	0.010
	Average	2.153	2.151	-0.002
	Min	2.018	2.012	-0.016
	Std Dev	0.061	0.061	0.006



	9.7 __SS_I_0p2V_5V					
Test Site	unkins Lab- Dallas					
Tester	TS364/FETS36412					
Test Number	EB588003					
Max Limit	3	µA				
Min Limit	1.5	µA				
krad(Si)	3	0	10	30	50	100
LL	1.500	1.500	1.500	1.500	1.500	1.500
Min	2.046	2.102	2.082	2.037	2.089	2.012
Average	2.140	2.135	2.140	2.154	2.173	2.152
Max	2.245	2.173	2.246	2.206	2.251	2.241
UL	3.000	3.000	3.000	3.000	3.000	3.000



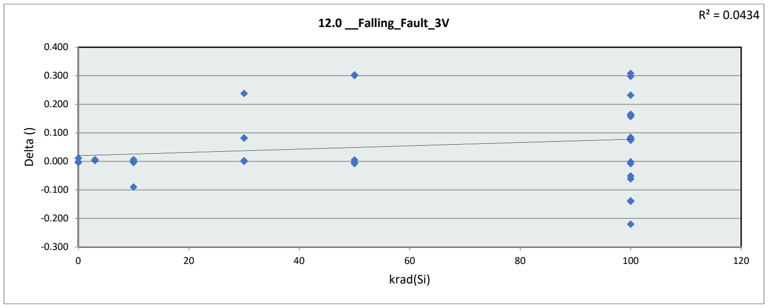
TID/HDR Biased Report

Die lot: 1087518 Exposure date: 11/15/2022

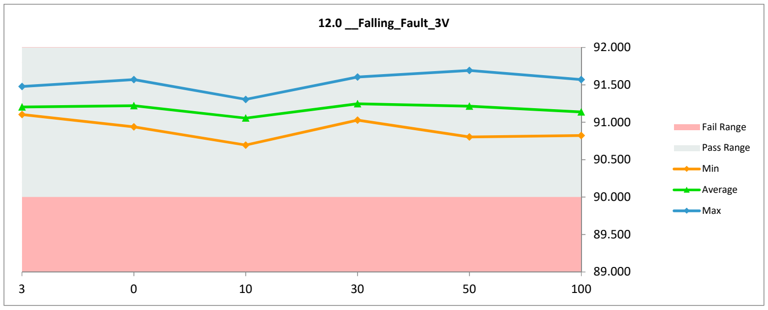
Assy Lot: 2517212

TPS7H4001-SHP

		12.0 __Falling_Fault_3V		
	Test Site	Junkins Lab- Dalla	Junkins Lab- Dallas	
	Tester	ETS364/FETS3641	ETS364/FETS36412	
	Test Number	EB588003	EB588003	
	Unit			
	Max Limit			
	Min Limit	90	90	
krad(Si)	Serial #	Pre Biased	Post Biased	Delta
100	1	90.993	91.069	0.076
100	2	90.949	90.888	-0.061
100	3	91.052	91.044	-0.008
100	4	91.130	91.213	0.083
100	5	91.027	90.887	-0.140
100	6	91.210	91.286	0.076
100	9	90.947	91.021	0.074
100	10	90.855	91.012	0.157
100	11	91.101	91.050	-0.051
100	12	91.334	91.410	0.076
100	13	91.432	91.294	-0.138
100	14	91.124	91.356	0.232
100	15	91.042	90.822	-0.220
100	16	90.746	90.909	0.163
100	17	90.825	91.133	0.308
100	18	91.099	91.264	0.165
100	19	90.885	91.048	0.163
100	20	91.002	91.300	0.298
100	21	90.937	91.013	0.076
100	22	91.493	91.571	0.078
100	23	90.903	90.987	0.084
100	24	91.443	91.441	-0.002
50	36	91.394	91.390	-0.004
50	37	91.389	91.692	0.303
50	38	90.798	90.803	0.005
50	39	91.169	91.161	-0.008
50	40	90.730	91.031	0.301
30	46	91.108	91.190	0.082
30	47	91.105	91.105	0.000
30	48	91.303	91.305	0.002
30	49	90.947	91.029	0.082
30	50	91.367	91.605	0.238
10	56	91.241	91.237	-0.004
10	57	90.785	90.695	-0.090
10	58	91.021	91.027	0.006
10	59	91.305	91.305	0.000
10	60	91.010	91.013	0.003
3	66	91.108	91.112	0.004
3	67	91.188	91.192	0.004
3	68	91.128	91.131	0.003
3	69	91.472	91.478	0.006
3	70	91.099	91.103	0.004
0	33	90.940	90.938	-0.002
0	34	91.140	91.151	0.011
0	35	91.575	91.571	-0.004
	Max	91.575	91.692	0.308
	Average	91.108	91.162	0.054
	Min	90.730	90.695	-0.220
	Std Dev	0.214	0.224	0.118



	12.0 __Falling_Fault_3V					
Test Site	unkins Lab- Dallas					
Tester	TS364/FETS36412					
Test Number	EB588003					
Max Limit						
Min Limit	90					
krad(Si)	3	0	10	30	50	100
LL	90.000	90.000	90.000	90.000	90.000	90.000
Min	91.103	90.938	90.695	91.029	90.803	90.822
Average	91.203	91.220	91.055	91.247	91.215	91.137
Max	91.478	91.571	91.305	91.605	91.692	91.571
UL						



TID/HDR Biased Report

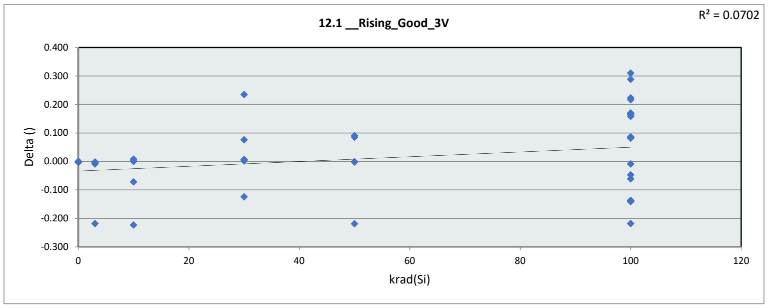
Die lot: 1087518 Exposure date: 11/15/2022

Assy Lot: 2517212

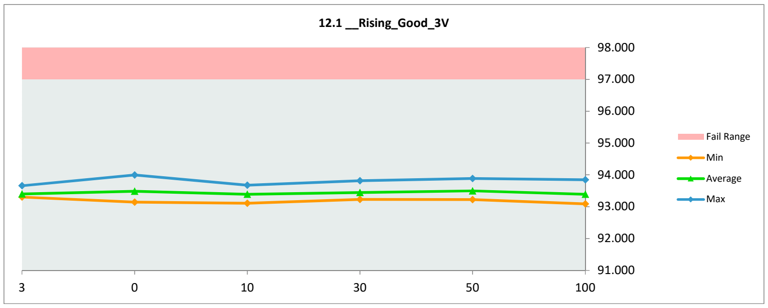
TPS7H4001-SHP

	12.1 __Rising_Good_3V	
Test Site	Junkins Lab- Dalla	Junkins Lab- Dallas
Tester	ETS364/FETS3641	ETS364/FETS36412
Test Number	EB588003	EB588003
Unit		
Max Limit	97	97
Min Limit		

krad(Si)	Serial #	Pre Biased	Post Biased	Delta
100	1	93.420	93.282	-0.138
100	2	93.150	93.308	0.158
100	3	93.260	93.251	-0.009
100	4	93.331	93.415	0.084
100	5	93.228	93.089	-0.139
100	6	93.424	93.506	0.082
100	9	93.357	93.442	0.085
100	10	93.282	93.221	-0.061
100	11	93.522	93.475	-0.047
100	12	93.528	93.391	-0.137
100	13	93.645	93.504	-0.141
100	14	93.336	93.553	0.217
100	15	93.471	93.253	-0.218
100	16	92.938	93.108	0.170
100	17	93.021	93.331	0.310
100	18	93.309	93.474	0.165
100	19	93.084	93.251	0.167
100	20	93.194	93.482	0.288
100	21	93.137	93.221	0.084
100	22	93.909	93.772	-0.137
100	23	93.338	93.424	0.086
100	24	93.623	93.846	0.223
50	36	93.790	93.789	-0.001
50	37	93.796	93.886	0.090
50	38	93.226	93.224	-0.002
50	39	93.574	93.355	-0.219
50	40	93.146	93.231	0.085
30	46	93.311	93.387	0.076
30	47	93.304	93.311	0.007
30	48	93.485	93.487	0.002
30	49	93.355	93.231	-0.124
30	50	93.579	93.814	0.235
10	56	93.673	93.673	0.000
10	57	93.182	93.110	-0.072
10	58	93.440	93.442	0.002
10	59	93.712	93.489	-0.223
10	60	93.217	93.225	0.008
3	66	93.308	93.302	-0.006
3	67	93.395	93.391	-0.004
3	68	93.344	93.335	-0.009
3	69	93.876	93.658	-0.218
3	70	93.307	93.305	-0.002
0	33	93.142	93.142	0.000
0	34	93.324	93.320	-0.004
0	35	93.995	93.995	0.000
	Max	93.995	93.995	0.310
	Average	93.400	93.416	0.016
	Min	92.938	93.089	-0.223
	Std Dev	0.240	0.219	0.135



	12.1 __Rising_Good_3V					
Test Site	unkins Lab- Dallas					
Tester	TS364/FETS36412					
Test Number	EB588003					
Max Limit	97					
Min Limit						
krad(Si)	3	0	10	30	50	100
LL						
Min	93.302	93.142	93.110	93.231	93.224	93.089
Average	93.398	93.486	93.388	93.446	93.497	93.391
Max	93.658	93.995	93.673	93.814	93.886	93.846
UL	97.000	97.000	97.000	97.000	97.000	97.000



TID/HDR Biased Report

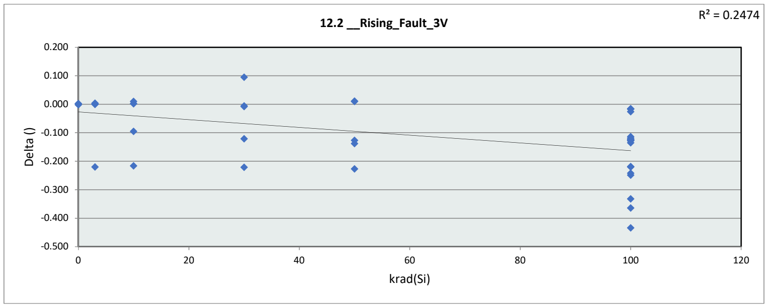
Die lot: 1087518

Exposure date: 11/15/2022

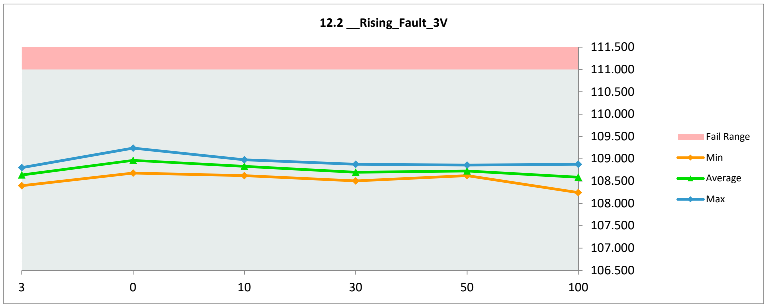
Assy Lot: 2517212

TPS7H4001-SHP

		12.2 __Rising_Fault_3V		
	Test Site	Junkins Lab- Dalla	Junkins Lab- Dallas	
	Tester	ETS364/FETS3641	ETS364/FETS36412	
	Test Number	EB588003	EB588003	
	Unit			
	Max Limit	111	111	
	Min Limit			
krad(Si)	Serial #	Pre Biased	Post Biased	Delta
100	1	108.682	108.559	-0.123
100	2	108.754	108.505	-0.249
100	3	108.924	108.704	-0.220
100	4	108.803	108.678	-0.125
100	5	108.848	108.729	-0.119
100	6	108.688	108.561	-0.127
100	9	108.756	108.630	-0.126
100	10	108.559	108.542	-0.017
100	11	108.507	108.491	-0.016
100	12	108.949	108.821	-0.128
100	13	108.903	108.776	-0.127
100	14	108.796	108.362	-0.434
100	15	108.491	108.272	-0.219
100	16	108.810	108.794	-0.016
100	17	108.702	108.588	-0.114
100	18	108.633	108.607	-0.026
100	19	108.729	108.487	-0.242
100	20	109.013	108.878	-0.135
100	21	108.662	108.298	-0.364
100	22	108.920	108.588	-0.332
100	23	108.367	108.242	-0.125
100	24	109.002	108.783	-0.219
50	36	108.985	108.758	-0.227
50	37	108.760	108.622	-0.138
50	38	108.848	108.859	0.011
50	39	108.748	108.758	0.010
50	40	108.760	108.633	-0.127
30	46	108.507	108.602	0.095
30	47	108.511	108.503	-0.008
30	48	108.884	108.878	-0.006
30	49	108.976	108.855	-0.121
30	50	108.876	108.655	-0.221
10	56	108.976	108.978	0.002
10	57	108.779	108.684	-0.095
10	58	108.622	108.624	0.002
10	59	108.876	108.886	0.010
10	60	109.194	108.978	-0.216
3	66	108.725	108.727	0.002
3	67	108.395	108.395	0.000
3	68	108.801	108.801	0.000
3	69	108.851	108.631	-0.220
3	70	108.633	108.637	0.004
0	33	108.972	108.974	0.002
0	34	108.682	108.680	-0.002
0	35	109.237	109.239	0.002
	Max	109.237	109.239	0.095
	Average	108.780	108.672	-0.108
	Min	108.367	108.242	-0.434
	Std Dev	0.189	0.200	0.116



	12.2 __Rising_Fault_3V					
Test Site	unkins Lab- Dallas					
Tester	TS364/FETS36412					
Test Number	EB588003					
Max Limit	111					
Min Limit						
krad(Si)	3	0	10	30	50	100
LL						
Min	108.395	108.680	108.624	108.503	108.622	108.242
Average	108.638	108.964	108.830	108.699	108.726	108.586
Max	108.801	109.239	108.978	108.878	108.859	108.878
UL	111.000	111.000	111.000	111.000	111.000	111.000



TID/HDR Biased Report

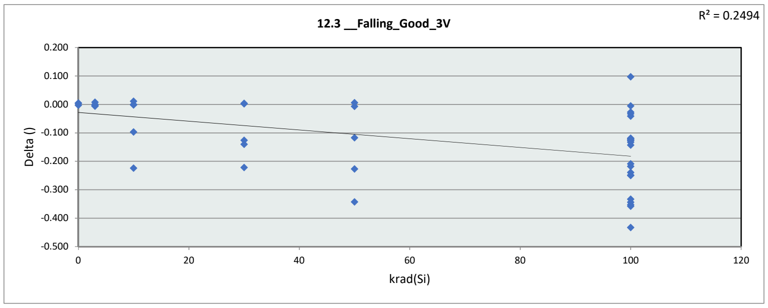
Die lot: 1087518

Exposure date: 11/15/2022

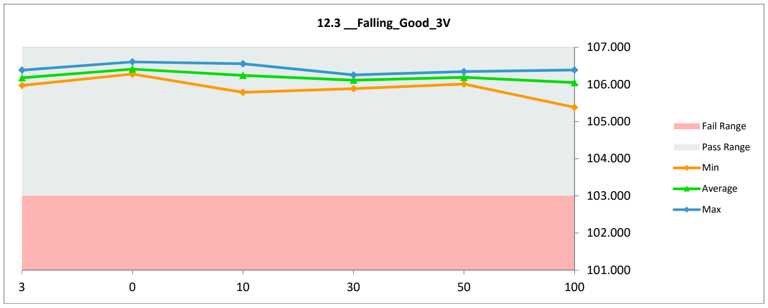
Assy Lot: 2517212

TPS7H4001-SHP

		12.3 __Falling_Good_3V		
	Test Site	Junkins Lab- Dalla	Junkins Lab- Dallas	
	Tester	ETS364/FETS3641	ETS364/FETS36412	
	Test Number	EB588003	EB588003	
	Unit			
	Max Limit			
	Min Limit	103	103	
krad(Si)	Serial #	Pre Biased	Post Biased	Delta
100	1	106.260	105.902	-0.358
100	2	106.354	106.105	-0.249
100	3	106.289	106.071	-0.218
100	4	106.387	106.260	-0.127
100	5	106.226	106.323	0.097
100	6	106.262	105.909	-0.353
100	9	106.133	106.013	-0.120
100	10	106.127	106.100	-0.027
100	11	106.106	106.065	-0.041
100	12	106.326	106.183	-0.143
100	13	106.479	106.355	-0.124
100	14	106.153	105.944	-0.209
100	15	106.065	106.060	-0.005
100	16	106.418	106.385	-0.033
100	17	106.061	105.936	-0.125
100	18	106.185	105.946	-0.239
100	19	106.095	105.845	-0.250
100	20	106.374	106.255	-0.119
100	21	106.003	105.659	-0.344
100	22	106.293	106.160	-0.133
100	23	105.715	105.382	-0.333
100	24	106.588	106.155	-0.433
50	36	106.350	106.343	-0.007
50	37	106.349	106.006	-0.343
50	38	106.229	106.235	0.006
50	39	106.356	106.129	-0.227
50	40	106.350	106.233	-0.117
30	46	106.106	105.966	-0.140
30	47	106.105	105.883	-0.222
30	48	106.252	106.254	0.002
30	49	106.350	106.224	-0.126
30	50	106.224	106.228	0.004
10	56	106.324	106.322	-0.002
10	57	106.378	106.281	-0.097
10	58	106.008	105.784	-0.224
10	59	106.252	106.252	0.000
10	60	106.542	106.553	0.011
3	66	106.097	106.105	0.008
3	67	105.974	105.970	-0.004
3	68	106.389	106.383	-0.006
3	69	106.235	106.229	-0.006
3	70	106.196	106.196	0.000
0	33	106.345	106.350	0.005
0	34	106.279	106.276	-0.003
0	35	106.600	106.604	0.004
	Max	106.600	106.604	0.097
	Average	106.249	106.129	-0.119
	Min	105.715	105.382	-0.433
	Std Dev	0.170	0.227	0.131



	12.3 __Falling_Good_3V					
Test Site	unkins Lab- Dallas					
Tester	TS364/FETS36412					
Test Number	EB588003					
Max Limit						
Min Limit	103					
krad(Si)	3	0	10	30	50	100
LL	103.000	103.000	103.000	103.000	103.000	103.000
Min	105.970	106.276	105.784	105.883	106.006	105.382
Average	106.177	106.410	106.238	106.111	106.189	106.046
Max	106.383	106.604	106.553	106.254	106.343	106.385
UL						



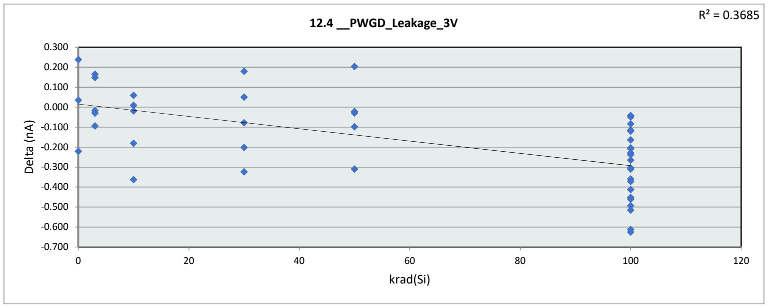
TID/HDR Biased Report

Die lot: 1087518 Exposure date: 11/15/2022

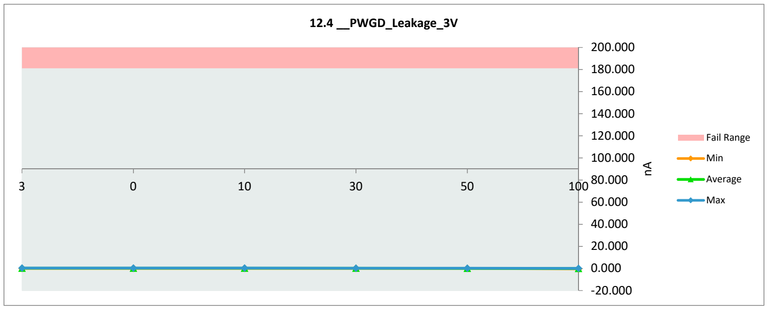
Assy Lot: 2517212

TPS7H4001-SHP

		12.4 __PWGD_Leakage_3V		
	Test Site	Junkins Lab- Dalla	Junkins Lab- Dallas	
	Tester	ETS364/FETS3641	ETS364/FETS36412	
	Test Number	EB588003	EB588003	
	Unit	nA	nA	
	Max Limit	181	181	
	Min Limit			
krad(Si)	Serial #	Pre Biased	Post Biased	Delta
100	1	0.133	-0.071	-0.204
100	2	0.172	-0.200	-0.372
100	3	0.179	-0.050	-0.229
100	4	0.303	-0.007	-0.310
100	5	0.313	0.048	-0.265
100	6	0.137	0.053	-0.084
100	9	0.346	-0.067	-0.413
100	10	0.139	-0.025	-0.164
100	11	0.340	-0.154	-0.494
100	12	0.093	-0.115	-0.208
100	13	0.230	-0.074	-0.304
100	14	0.285	-0.075	-0.360
100	15	0.086	0.044	-0.042
100	16	0.310	-0.151	-0.461
100	17	0.372	-0.240	-0.612
100	18	0.240	0.002	-0.238
100	19	0.024	-0.025	-0.049
100	20	0.110	-0.005	-0.115
100	21	0.274	-0.241	-0.515
100	22	0.069	-0.051	-0.120
100	23	0.351	-0.274	-0.625
100	24	0.126	-0.326	-0.452
50	36	0.056	0.034	-0.022
50	37	0.075	0.278	0.203
50	38	0.332	0.022	-0.310
50	39	0.274	0.176	-0.098
50	40	0.273	0.244	-0.029
30	46	0.044	0.223	0.179
30	47	0.403	0.201	-0.202
30	48	0.168	0.218	0.050
30	49	0.422	0.098	-0.324
30	50	0.374	0.296	-0.078
10	56	0.394	0.031	-0.363
10	57	0.308	0.317	0.009
10	58	0.208	0.267	0.059
10	59	0.268	0.249	-0.019
10	60	0.256	0.075	-0.181
3	66	0.230	0.136	-0.094
3	67	0.150	0.315	0.165
3	68	0.124	0.107	-0.017
3	69	0.342	0.312	-0.030
3	70	0.009	0.157	0.148
0	33	0.324	0.103	-0.221
0	34	0.088	0.326	0.238
0	35	0.076	0.111	0.035
	Max	0.422	0.326	0.238
	Average	0.218	0.051	-0.168
	Min	0.009	-0.326	-0.625
	Std Dev	0.117	0.174	0.216



	12.4 __PWGD_Leakage_3V					
Test Site	unkins Lab- Dallas					
Tester	TS364/FETS36412					
Test Number	EB588003					
Max Limit	181	nA				
Min Limit		nA				
krad(Si)	3	0	10	30	50	100
LL						
Min	0.107	0.103	0.031	0.098	0.022	-0.326
Average	0.205	0.180	0.188	0.207	0.151	-0.091
Max	0.315	0.326	0.317	0.296	0.278	0.053
UL	181.000	181.000	181.000	181.000	181.000	181.000



TID/HDR Biased Report

Die lot: 1087518

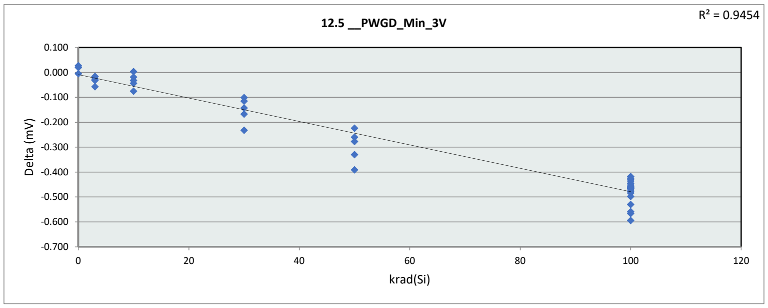
Exposure date: 11/15/2022

Assy Lot: 2517212

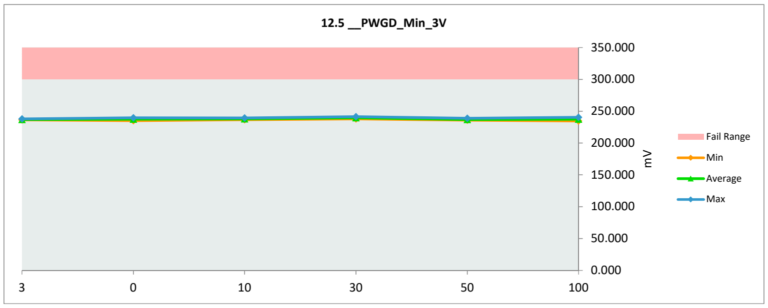
TPS7H4001-SHP

	12.5 __PWGD_Min_3V	
Test Site	Junkins Lab- Dalla	Junkins Lab- Dallas
Tester	ETS364/FETS3641	ETS364/FETS36412
Test Number	EB588003	EB588003
Unit	mV	mV
Max Limit	300	300
Min Limit		

krad(Si)	Serial #	Pre Biased	Post Biased	Delta
100	1	237.101	236.642	-0.459
100	2	235.525	234.959	-0.566
100	3	239.623	239.093	-0.530
100	4	239.151	238.557	-0.594
100	5	240.753	240.301	-0.452
100	6	237.811	237.383	-0.428
100	9	238.604	238.137	-0.467
100	10	235.470	235.003	-0.467
100	11	238.196	237.760	-0.436
100	12	237.503	237.043	-0.460
100	13	235.908	235.429	-0.479
100	14	239.136	238.577	-0.559
100	15	238.779	238.360	-0.419
100	16	238.149	237.721	-0.428
100	17	237.291	236.831	-0.460
100	18	238.412	237.994	-0.418
100	19	237.743	237.245	-0.498
100	20	238.098	237.653	-0.445
100	21	236.948	236.476	-0.472
100	22	237.449	237.021	-0.428
100	23	238.964	238.480	-0.484
100	24	235.018	234.555	-0.463
50	36	236.523	236.246	-0.277
50	37	239.185	238.794	-0.391
50	38	237.062	236.802	-0.260
50	39	236.301	235.971	-0.330
50	40	237.055	236.831	-0.224
30	46	240.203	240.102	-0.101
30	47	239.606	239.491	-0.115
30	48	238.013	237.870	-0.143
30	49	241.553	241.386	-0.167
30	50	239.166	238.934	-0.232
10	56	238.444	238.400	-0.044
10	57	236.666	236.647	-0.019
10	58	236.644	236.612	-0.032
10	59	239.501	239.426	-0.075
10	60	238.966	238.969	0.003
3	66	236.425	236.408	-0.017
3	67	236.955	236.928	-0.027
3	68	236.827	236.770	-0.057
3	69	237.852	237.836	-0.016
3	70	236.795	236.763	-0.032
0	33	239.649	239.676	0.027
0	34	235.078	235.098	0.020
0	35	237.233	237.228	-0.005
	Max	241.553	241.386	0.027
	Average	237.852	237.565	-0.287
	Min	235.018	234.555	-0.594
	Std Dev	1.491	1.503	0.206



	12.5 __PWGD_Min_3V					
Test Site	unkins Lab- Dallas					
Tester	TS364/FETS36412					
Test Number	EB588003					
Max Limit	300	mV				
Min Limit		mV				
krad(Si)	3	0	10	30	50	100
LL						
Min	236.408	235.098	236.612	237.870	235.971	234.555
Average	236.941	237.334	238.011	239.557	236.929	237.328
Max	237.836	239.676	239.426	241.386	238.794	240.301
UL	300.000	300.000	300.000	300.000	300.000	300.000



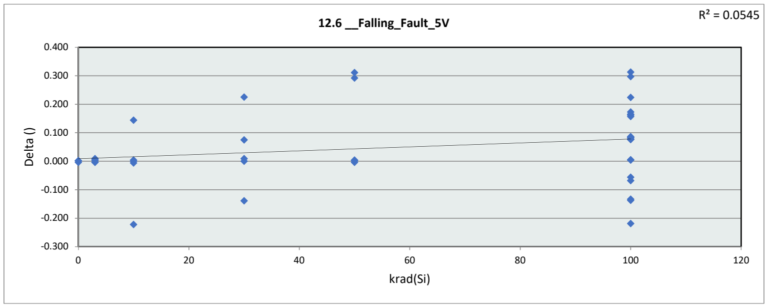
TID/HDR Biased Report

Die lot: 1087518 Exposure date: 11/15/2022

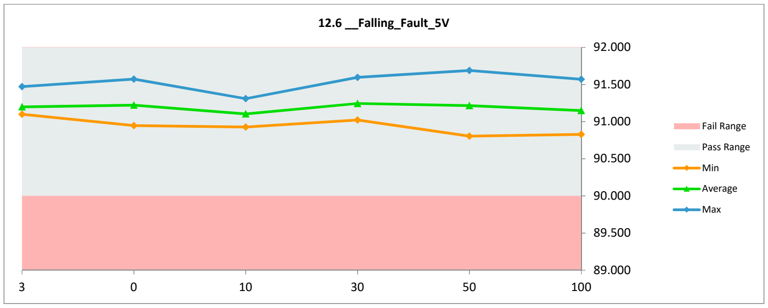
Assy Lot: 2517212

TPS7H4001-SHP

		12.6 __Falling_Fault_5V		
	Test Site	Junkins Lab- Dalla	Junkins Lab- Dallas	
	Tester	ETS364/FETS3641	ETS364/FETS36412	
	Test Number	EB588003	EB588003	
	Unit			
	Max Limit			
	Min Limit	90	90	
krad(Si)	Serial #	Pre Biased	Post Biased	Delta
100	1	90.989	91.073	0.084
100	2	90.949	90.881	-0.068
100	3	91.046	91.050	0.004
100	4	91.131	91.208	0.077
100	5	91.025	90.892	-0.133
100	6	91.212	91.296	0.084
100	9	90.944	91.027	0.083
100	10	90.850	91.015	0.165
100	11	91.103	91.276	0.173
100	12	91.329	91.407	0.078
100	13	91.431	91.294	-0.137
100	14	91.126	91.350	0.224
100	15	91.048	90.829	-0.219
100	16	90.744	90.901	0.157
100	17	90.818	91.131	0.313
100	18	91.098	91.260	0.162
100	19	91.108	91.052	-0.056
100	20	91.008	91.305	0.297
100	21	90.937	91.013	0.076
100	22	91.493	91.571	0.078
100	23	90.901	90.987	0.086
100	24	91.445	91.450	0.005
50	36	91.385	91.389	0.004
50	37	91.396	91.688	0.292
50	38	90.809	90.805	-0.004
50	39	91.163	91.165	0.002
50	40	90.720	91.031	0.311
30	46	91.327	91.188	-0.139
30	47	91.107	91.107	0.000
30	48	91.300	91.309	0.009
30	49	90.946	91.021	0.075
30	50	91.372	91.597	0.225
10	56	91.237	91.237	0.000
10	57	90.783	90.927	0.144
10	58	91.251	91.029	-0.222
10	59	91.305	91.309	0.004
10	60	91.021	91.015	-0.006
3	66	91.103	91.107	0.004
3	67	91.186	91.190	0.004
3	68	91.131	91.128	-0.003
3	69	91.476	91.472	-0.004
3	70	91.090	91.099	0.009
0	33	90.944	90.946	0.002
0	34	91.146	91.148	0.002
0	35	91.577	91.573	-0.004
	Max	91.577	91.688	0.313
	Average	91.122	91.172	0.050
	Min	90.720	90.805	-0.222
	Std Dev	0.215	0.215	0.127



	12.6 __Falling_Fault_5V					
Test Site	unkins Lab- Dallas					
Tester	TS364/FETS36412					
Test Number	EB588003					
Max Limit						
Min Limit	90					
krad(Si)	3	0	10	30	50	100
LL	90.000	90.000	90.000	90.000	90.000	90.000
Min	91.099	90.946	90.927	91.021	90.805	90.829
Average	91.199	91.222	91.103	91.244	91.216	91.149
Max	91.472	91.573	91.309	91.597	91.688	91.571
UL						



TID/HDR Biased Report

Die lot: 1087518 Exposure date: 11/15/2022

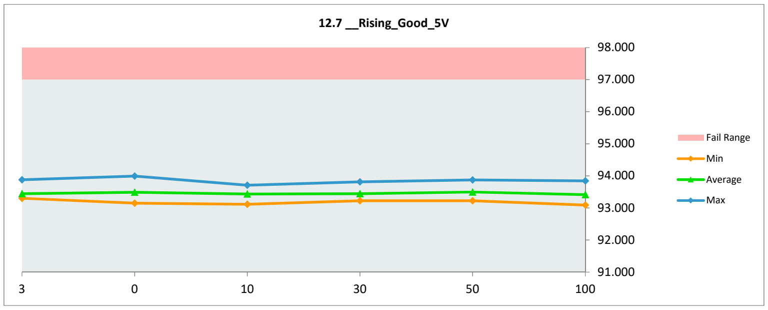
Assy Lot: 2517212

TPS7H4001-SHP

	12.7 __Rising_Good_5V	
Test Site	Junkins Lab- Dalla	Junkins Lab- Dallas
Tester	ETS364/FETS36412	ETS364/FETS36412
Test Number	EB588003	EB588003
Unit		
Max Limit	97	97
Min Limit		

krad(Si)	Serial #	Pre Biased	Post Biased	Delta
100	1	93.422	93.276	-0.146
100	2	93.144	93.308	0.164
100	3	93.473	93.262	-0.211
100	4	93.338	93.417	0.079
100	5	93.224	93.089	-0.135
100	6	93.649	93.510	-0.139
100	9	93.358	93.444	0.086
100	10	93.280	93.454	0.174
100	11	93.526	93.479	-0.047
100	12	93.526	93.608	0.082
100	13	93.649	93.510	-0.139
100	14	93.557	93.559	0.002
100	15	93.477	93.249	-0.228
100	16	92.943	93.114	0.171
100	17	93.255	93.342	0.087
100	18	93.314	93.479	0.165
100	19	93.309	93.251	-0.058
100	20	93.413	93.496	0.083
100	21	93.362	93.219	-0.143
100	22	93.907	93.780	-0.127
100	23	93.336	93.415	0.079
100	24	93.621	93.842	0.221
50	36	93.794	93.790	-0.004
50	37	93.785	93.872	0.087
50	38	93.231	93.226	-0.005
50	39	93.573	93.360	-0.213
50	40	93.133	93.230	0.097
30	46	93.522	93.391	-0.131
30	47	93.524	93.304	-0.220
30	48	93.480	93.493	0.013
30	49	93.357	93.224	-0.133
30	50	93.814	93.816	0.002
10	56	93.669	93.669	0.000
10	57	93.404	93.112	-0.292
10	58	93.449	93.448	-0.001
10	59	93.710	93.710	0.000
10	60	93.221	93.226	0.005
3	66	93.529	93.309	-0.220
3	67	93.386	93.391	0.005
3	68	93.338	93.331	-0.007
3	69	93.878	93.880	0.002
3	70	93.311	93.301	-0.010
0	33	93.142	93.150	0.008
0	34	93.328	93.326	-0.002
0	35	93.999	93.995	-0.004
	Max	93.999	93.995	0.221
	Average	93.459	93.437	-0.022
	Min	92.943	93.089	-0.292
	Std Dev	0.226	0.230	0.124

	12.7 __Rising_Good_5V					
Test Site	unkins Lab- Dallas					
Tester	TS364/FETS36412					
Test Number	EB588003					
Max Limit	97					
Min Limit						
krad(Si)	3	0	10	30	50	100
LL						
Min	93.301	93.150	93.112	93.224	93.226	93.089
Average	93.442	93.490	93.433	93.446	93.496	93.414
Max	93.880	93.995	93.710	93.816	93.872	93.842
UL	97.000	97.000	97.000	97.000	97.000	97.000



TID/HDR Biased Report

Die lot: 1087518

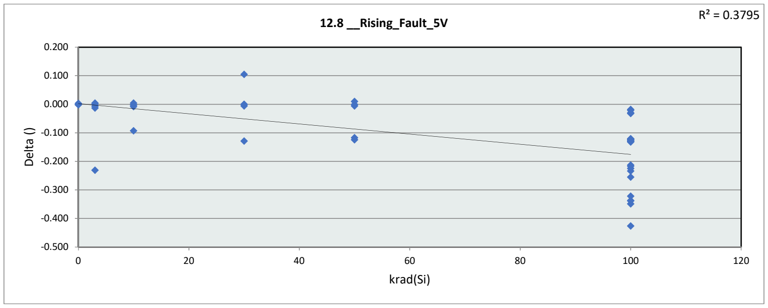
Exposure date: 11/15/2022

Assy Lot: 2517212

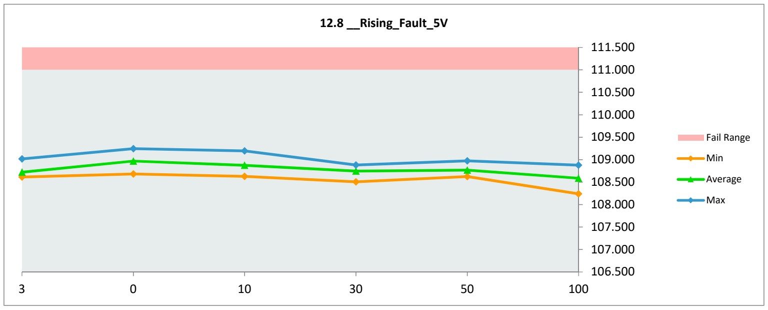
TPS7H4001-SHP

	12.8 ___Rising_Fault_5V	
Test Site	Junkins Lab- Dallas	Junkins Lab- Dallas
Tester	ETS364/FETS36412	ETS364/FETS36412
Test Number	EB588003	EB588003
Unit		
Max Limit	111	111
Min Limit		

krad(Si)	Serial #	Pre Biased	Post Biased	Delta
100	1	108.689	108.566	-0.123
100	2	108.758	108.503	-0.255
100	3	108.920	108.707	-0.213
100	4	108.799	108.678	-0.121
100	5	108.851	108.721	-0.130
100	6	108.886	108.564	-0.322
100	9	108.752	108.624	-0.128
100	10	108.561	108.529	-0.032
100	11	108.509	108.491	-0.018
100	12	108.953	108.821	-0.132
100	13	108.901	108.776	-0.125
100	14	108.799	108.373	-0.426
100	15	108.489	108.272	-0.217
100	16	108.826	108.805	-0.021
100	17	108.707	108.586	-0.121
100	18	108.633	108.603	-0.030
100	19	108.721	108.487	-0.234
100	20	109.006	108.878	-0.128
100	21	108.662	108.313	-0.349
100	22	108.920	108.582	-0.338
100	23	108.575	108.238	-0.337
100	24	109.008	108.783	-0.225
50	36	108.964	108.974	0.010
50	37	108.750	108.626	-0.124
50	38	108.851	108.850	-0.001
50	39	108.756	108.750	-0.006
50	40	108.752	108.635	-0.117
30	46	108.505	108.610	0.105
30	47	108.507	108.507	0.000
30	48	108.886	108.880	-0.006
30	49	108.977	108.848	-0.129
30	50	108.880	108.880	0.000
10	56	108.978	108.982	0.004
10	57	108.779	108.686	-0.093
10	58	108.630	108.628	-0.002
10	59	108.886	108.878	-0.008
10	60	109.199	109.196	-0.003
3	66	108.723	108.727	0.004
3	67	108.612	108.612	0.000
3	68	109.029	109.016	-0.013
3	69	108.851	108.620	-0.231
3	70	108.640	108.633	-0.007
0	33	108.977	108.976	-0.001
0	34	108.684	108.682	-0.002
0	35	109.243	109.246	0.003
	Max	109.243	109.246	0.105
	Average	108.800	108.696	-0.103
	Min	108.489	108.238	-0.426
	Std Dev	0.177	0.216	0.123



	12.8 ___Rising_Fault_5V					
Test Site	unkins Lab- Dallas					
Tester	TS364/FETS36412					
Test Number	EB588003					
Max Limit	111					
Min Limit						
krad(Si)	3	0	10	30	50	100
LL						
Min	108.612	108.682	108.628	108.507	108.626	108.238
Average	108.722	108.968	108.874	108.745	108.767	108.586
Max	109.016	109.246	109.196	108.880	108.974	108.878
UL	111.000	111.000	111.000	111.000	111.000	111.000



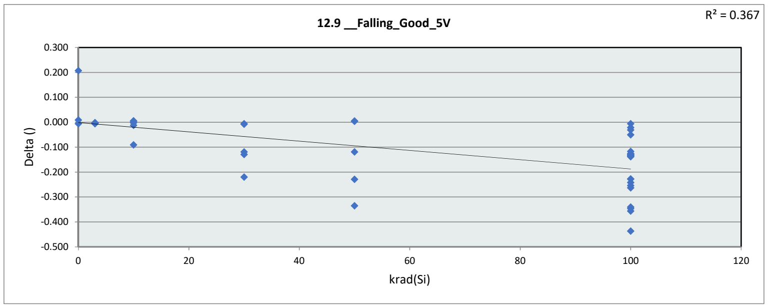
TID/HDR Biased Report

Die lot: 1087518 Exposure date: 11/15/2022

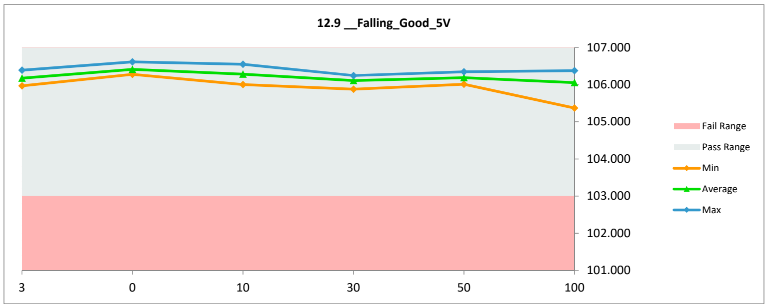
Assy Lot: 2517212

TPS7H4001-SHP

		12.9 __Falling_Good_5V		
	Test Site	Junkins Lab- Dalla	Junkins Lab- Dallas	
	Tester	ETS364/FETS36412	ETS364/FETS36412	
	Test Number	EB588003	EB588003	
	Unit			
	Max Limit			
	Min Limit	103	103	
krad(Si)	Serial #	Pre Biased	Post Biased	Delta
100	1	106.263	106.129	-0.134
100	2	106.358	106.095	-0.263
100	3	106.295	106.067	-0.228
100	4	106.391	106.256	-0.135
100	5	106.446	106.319	-0.127
100	6	106.260	105.904	-0.356
100	9	106.136	105.998	-0.138
100	10	106.121	106.100	-0.021
100	11	106.106	106.075	-0.031
100	12	106.323	106.196	-0.127
100	13	106.479	106.352	-0.127
100	14	106.162	105.934	-0.228
100	15	106.067	106.061	-0.006
100	16	106.427	106.377	-0.050
100	17	106.069	105.936	-0.133
100	18	106.194	105.952	-0.242
100	19	106.097	105.843	-0.254
100	20	106.372	106.255	-0.117
100	21	106.001	105.661	-0.340
100	22	106.291	106.162	-0.129
100	23	105.717	105.371	-0.346
100	24	106.597	106.160	-0.437
50	36	106.343	106.347	0.004
50	37	106.345	106.010	-0.335
50	38	106.224	106.229	0.005
50	39	106.354	106.125	-0.229
50	40	106.354	106.235	-0.119
30	46	106.101	105.972	-0.129
30	47	106.097	105.877	-0.220
30	48	106.254	106.246	-0.008
30	49	106.350	106.231	-0.119
30	50	106.230	106.224	-0.006
10	56	106.326	106.314	-0.012
10	57	106.374	106.283	-0.091
10	58	105.998	106.004	0.006
10	59	106.255	106.253	-0.002
10	60	106.545	106.549	0.004
3	66	106.103	106.101	-0.002
3	67	105.974	105.968	-0.006
3	68	106.391	106.389	-0.002
3	69	106.231	106.228	-0.003
3	70	106.187	106.185	-0.002
0	33	106.138	106.345	0.207
0	34	106.283	106.277	-0.006
0	35	106.604	106.613	0.009
	Max	106.604	106.613	0.207
	Average	106.250	106.138	-0.112
	Min	105.717	105.371	-0.437
	Std Dev	0.173	0.220	0.131



	12.9 __Falling_Good_5V					
Test Site	unkins Lab- Dallas					
Tester	TS364/FETS36412					
Test Number	EB588003					
Max Limit						
Min Limit	103					
krad(Si)	3	0	10	30	50	100
LL	103.000	103.000	103.000	103.000	103.000	103.000
Min	105.968	106.277	106.004	105.877	106.010	105.371
Average	106.174	106.412	106.281	106.110	106.189	106.055
Max	106.389	106.613	106.549	106.246	106.347	106.377
UL						



TID/HDR Biased Report

Die lot: 1087518

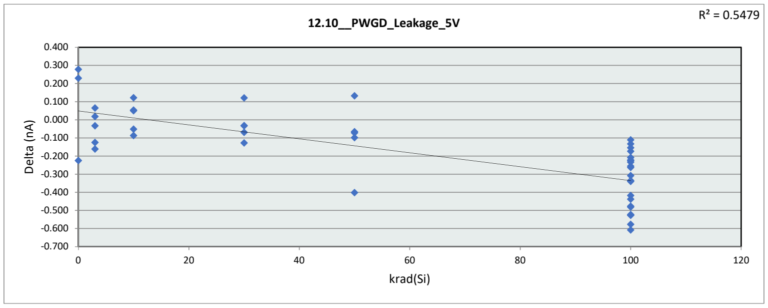
Exposure date: 11/15/2022

Assy Lot: 2517212

TPS7H4001-SHP

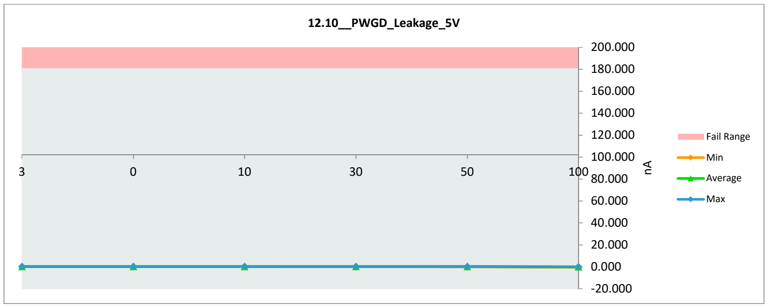
	12.10__PWGD_Leakage_5V	
Test Site	Junkins Lab- Dallas	Junkins Lab- Dallas
Tester	ETS364/FETS3641	ETS364/FETS36412
Test Number	EB588003	EB588003
Unit	nA	nA
Max Limit	181	181
Min Limit		

krad(Si)	Serial #	Pre Biased	Post Biased	Delta
100	1	0.155	-0.079	-0.234
100	2	0.360	-0.217	-0.577
100	3	0.198	-0.058	-0.256
100	4	0.126	-0.007	-0.133
100	5	0.276	0.068	-0.208
100	6	0.125	-0.029	-0.154
100	9	0.172	-0.168	-0.340
100	10	0.164	-0.144	-0.308
100	11	0.193	-0.225	-0.418
100	12	0.094	-0.132	-0.226
100	13	0.358	-0.250	-0.608
100	14	0.415	-0.062	-0.477
100	15	0.069	-0.042	-0.111
100	16	0.369	-0.154	-0.523
100	17	0.301	-0.180	-0.481
100	18	0.275	-0.060	-0.335
100	19	-0.025	-0.247	-0.222
100	20	0.018	-0.156	-0.174
100	21	0.304	-0.222	-0.526
100	22	0.080	-0.183	-0.263
100	23	0.294	-0.232	-0.526
100	24	0.052	-0.386	-0.438
50	36	0.131	0.065	-0.066
50	37	0.179	0.311	0.132
50	38	0.367	-0.035	-0.402
50	39	0.297	0.199	-0.098
50	40	0.324	0.252	-0.072
30	46	0.135	0.256	0.121
30	47	0.291	0.222	-0.069
30	48	0.172	0.140	-0.032
30	49	0.269	0.236	-0.033
30	50	0.395	0.267	-0.128
10	56	0.201	0.114	-0.087
10	57	0.268	0.318	0.050
10	58	0.118	0.240	0.122
10	59	0.184	0.238	0.054
10	60	0.179	0.127	-0.052
3	66	0.282	0.121	-0.161
3	67	0.213	0.231	0.018
3	68	0.050	0.115	0.065
3	69	0.347	0.314	-0.033
3	70	0.248	0.123	-0.125
0	33	0.338	0.113	-0.225
0	34	0.091	0.321	0.230
0	35	-0.166	0.112	0.278
	Max	0.415	0.321	0.278
	Average	0.206	0.027	-0.179
	Min	-0.166	-0.386	-0.608
	Std Dev	0.124	0.195	0.221



	12.10__PWGD_Leakage_5V	
Test Site	unkins Lab- Dallas	
Tester	TS364/FETS36412	
Test Number	EB588003	
Max Limit	181	nA
Min Limit		nA

krad(Si)	3	0	10	30	50	100
LL						
Min	0.115	0.112	0.114	0.140	-0.035	-0.386
Average	0.181	0.182	0.207	0.224	0.158	-0.144
Max	0.314	0.321	0.318	0.267	0.311	0.068
UL	181.000	181.000	181.000	181.000	181.000	181.000



TID/HDR Biased Report

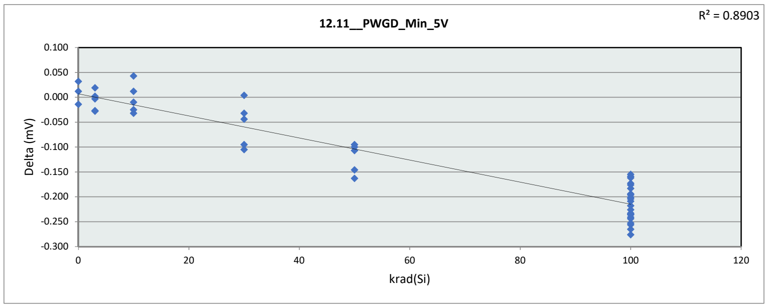
Die lot: 1087518

Exposure date: 11/15/2022

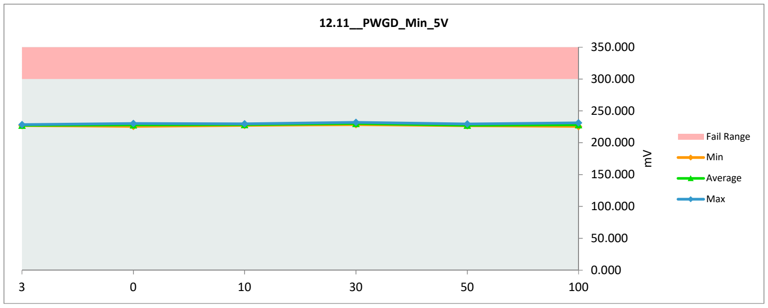
Assy Lot: 2517212

TPS7H4001-SHP

		12.11__PWGD_Min_5V		
	Test Site	Junkins Lab- Dalla	Junkins Lab- Dallas	
	Tester	ETS364/FETS3641	ETS364/FETS36412	
	Test Number	EB588003	EB588003	
	Unit	mV	mV	
	Max Limit	300	300	
	Min Limit			
krad(Si)	Serial #	Pre Biased	Post Biased	Delta
100	1	227.562	227.358	-0.204
100	2	226.164	225.970	-0.194
100	3	230.177	229.921	-0.256
100	4	229.675	229.457	-0.218
100	5	231.341	231.140	-0.201
100	6	228.530	228.277	-0.253
100	9	229.140	228.944	-0.196
100	10	226.128	225.895	-0.233
100	11	228.849	228.666	-0.183
100	12	228.134	227.893	-0.241
100	13	226.546	226.320	-0.226
100	14	229.612	229.450	-0.162
100	15	229.372	229.213	-0.159
100	16	228.844	228.689	-0.155
100	17	227.806	227.562	-0.244
100	18	229.085	228.909	-0.176
100	19	228.331	228.066	-0.265
100	20	228.504	228.268	-0.236
100	21	227.381	227.208	-0.173
100	22	228.108	227.832	-0.276
100	23	229.583	229.374	-0.209
100	24	225.775	225.540	-0.235
50	36	226.892	226.785	-0.107
50	37	229.559	229.396	-0.163
50	38	227.638	227.538	-0.100
50	39	226.933	226.787	-0.146
50	40	227.334	227.239	-0.095
30	46	230.751	230.646	-0.105
30	47	229.970	229.938	-0.032
30	48	228.438	228.394	-0.044
30	49	232.025	232.029	0.004
30	50	229.695	229.600	-0.095
10	56	229.048	229.060	0.012
10	57	227.240	227.215	-0.025
10	58	227.174	227.164	-0.010
10	59	229.846	229.814	-0.032
10	60	229.433	229.476	0.043
3	66	226.889	226.908	0.019
3	67	227.539	227.541	0.002
3	68	227.344	227.341	-0.003
3	69	228.424	228.396	-0.028
3	70	227.188	227.161	-0.027
0	33	230.057	230.089	0.032
0	34	225.792	225.778	-0.014
0	35	227.640	227.652	0.012
	Max	232.025	232.029	0.043
	Average	228.389	228.264	-0.124
	Min	225.775	225.540	-0.276
	Std Dev	1.461	1.469	0.100



	12.11__PWGD_Min_5V					
Test Site	unkins Lab- Dallas					
Tester	TS364/FETS36412					
Test Number	EB588003					
Max Limit	300	mV				
Min Limit		mV				
krad(Si)	3	0	10	30	50	100
LL						
Min	226.908	225.778	227.164	228.394	226.785	225.540
Average	227.469	227.840	228.546	230.121	227.549	228.180
Max	228.396	230.089	229.814	232.029	229.396	231.140
UL	300.000	300.000	300.000	300.000	300.000	300.000



TID/HDR Biased Report

Die lot: 1087518

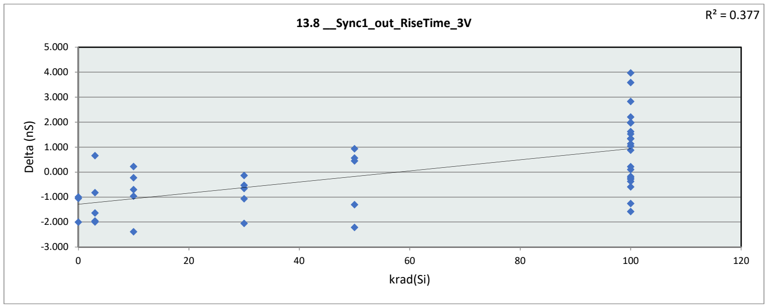
Exposure date: 11/15/2022

Assy Lot: 2517212

TPS7H4001-SHP

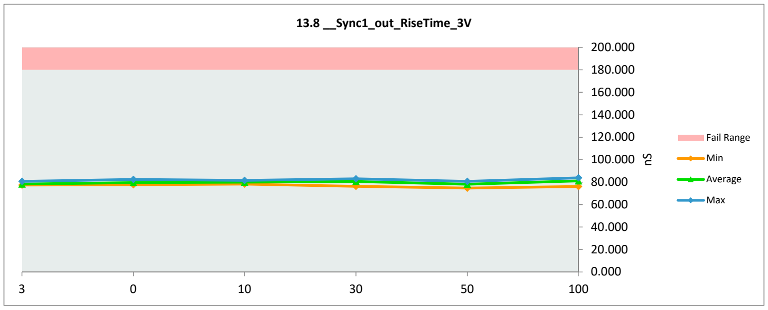
	13.8 __Sync1_out_RiseTime_3V	
Test Site	Junkins Lab- Dalla	Junkins Lab- Dallas
Tester	ETS364/FETS3641	ETS364/FETS36412
Test Number	EB588003	EB588003
Unit	nS	nS
Max Limit	180	180
Min Limit		

krad(Si)	Serial #	Pre Biased	Post Biased	Delta
100	1	79.428	80.759	1.331
100	2	77.172	77.387	0.215
100	3	81.876	83.845	1.969
100	4	79.647	83.232	3.585
100	5	82.605	81.025	-1.580
100	6	80.482	82.007	1.525
100	9	78.759	78.584	-0.175
100	10	80.102	81.143	1.041
100	11	79.713	80.593	0.880
100	12	82.469	82.188	-0.281
100	13	81.643	81.053	-0.590
100	14	81.463	81.092	-0.371
100	15	80.343	81.479	1.136
100	16	79.837	83.808	3.971
100	17	79.520	81.140	1.620
100	18	80.073	82.281	2.208
100	19	80.501	83.325	2.824
100	20	77.408	76.151	-1.257
100	21	79.871	81.861	1.990
100	22	78.778	80.124	1.346
100	23	80.808	80.906	0.098
100	24	80.890	80.657	-0.233
50	36	78.015	78.579	0.564
50	37	79.628	78.321	-1.307
50	38	79.781	80.718	0.937
50	39	77.766	78.210	0.444
50	40	76.933	74.719	-2.214
30	46	82.120	81.591	-0.529
30	47	82.775	80.720	-2.055
30	48	76.926	76.268	-0.658
30	49	82.223	81.154	-1.069
30	50	83.080	82.944	-0.136
10	56	81.144	80.445	-0.699
10	57	79.581	79.803	0.222
10	58	80.970	80.007	-0.963
10	59	80.585	78.196	-2.389
10	60	81.818	81.590	-0.228
3	66	77.515	78.173	0.658
3	67	79.574	77.574	-2.000
3	68	79.002	77.362	-1.640
3	69	82.638	80.681	-1.957
3	70	78.405	77.585	-0.820
0	33	83.385	82.391	-0.994
0	34	78.705	77.648	-1.057
0	35	80.776	78.773	-2.003
	Max	83.385	83.845	3.971
	Average	80.150	80.180	0.030
	Min	76.926	74.719	-2.389
	Std Dev	1.733	2.161	1.543



	13.8 __Sync1_out_RiseTime_3	
Test Site	unkins Lab- Dallas	
Tester	TS364/FETS36412	
Test Number	EB588003	
Max Limit	180	nS
Min Limit		nS

krad(Si)	3	0	10	30	50	100
LL						
Min	77.362	77.648	78.196	76.268	74.719	76.151
Average	78.275	79.604	80.008	80.535	78.109	81.120
Max	80.681	82.391	81.590	82.944	80.718	83.845
UL	180.000	180.000	180.000	180.000	180.000	180.000



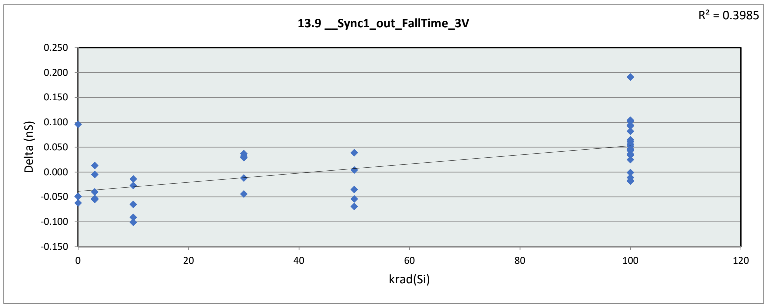
TID/HDR Biased Report

Die lot: 1087518 Exposure date: 11/15/2022

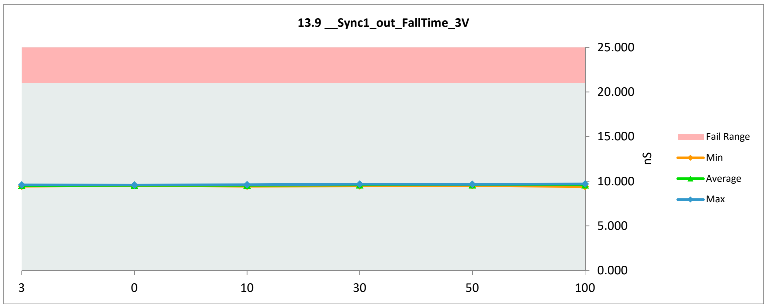
Assy Lot: 2517212

TPS7H4001-SHP

		13.9 __Sync1_out_FallTime_3V		
	Test Site	Junkins Lab- Dalla	Junkins Lab- Dallas	
	Tester	ETS364/FETS3641	ETS364/FETS36412	
	Test Number	EB588003	EB588003	
	Unit	nS	nS	
	Max Limit	21	21	
	Min Limit			
krad(Si)	Serial #	Pre Biased	Post Biased	Delta
100	1	9.617	9.600	-0.017
100	2	9.365	9.410	0.045
100	3	9.422	9.526	0.104
100	4	9.447	9.638	0.191
100	5	9.443	9.537	0.094
100	6	9.610	9.666	0.056
100	9	9.463	9.445	-0.018
100	10	9.636	9.670	0.034
100	11	9.477	9.476	-0.001
100	12	9.553	9.635	0.082
100	13	9.597	9.586	-0.011
100	14	9.589	9.635	0.046
100	15	9.502	9.563	0.061
100	16	9.503	9.568	0.065
100	17	9.599	9.701	0.102
100	18	9.602	9.627	0.025
100	19	9.646	9.689	0.043
100	20	9.526	9.562	0.036
100	21	9.581	9.627	0.046
100	22	9.621	9.673	0.052
100	23	9.498	9.591	0.093
100	24	9.606	9.700	0.094
50	36	9.631	9.596	-0.035
50	37	9.632	9.636	0.004
50	38	9.736	9.667	-0.069
50	39	9.571	9.517	-0.054
50	40	9.539	9.578	0.039
30	46	9.666	9.654	-0.012
30	47	9.618	9.574	-0.044
30	48	9.444	9.481	0.037
30	49	9.500	9.529	0.029
30	50	9.652	9.684	0.032
10	56	9.707	9.616	-0.091
10	57	9.516	9.451	-0.065
10	58	9.599	9.572	-0.027
10	59	9.561	9.547	-0.014
10	60	9.717	9.616	-0.101
3	66	9.500	9.445	-0.055
3	67	9.619	9.566	-0.053
3	68	9.455	9.468	0.013
3	69	9.638	9.598	-0.040
3	70	9.592	9.587	-0.005
0	33	9.631	9.582	-0.049
0	34	9.437	9.533	0.096
0	35	9.634	9.572	-0.062
	Max	9.736	9.701	0.191
	Average	9.567	9.582	0.015
	Min	9.365	9.410	-0.101
	Std Dev	0.086	0.074	0.062



	13.9 __Sync1_out_FallTime_3V					
Test Site	unkins Lab- Dallas					
Tester	TS364/FETS36412					
Test Number	EB588003					
Max Limit	21	nS				
Min Limit		nS				
krad(Si)	3	0	10	30	50	100
LL						
Min	9.445	9.533	9.451	9.481	9.517	9.410
Average	9.533	9.562	9.560	9.584	9.599	9.597
Max	9.598	9.582	9.616	9.684	9.667	9.701
UL	21.000	21.000	21.000	21.000	21.000	21.000



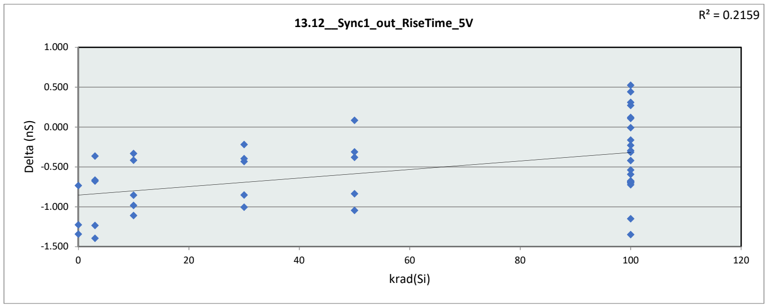
TID/HDR Biased Report

Die lot: 1087518 Exposure date: 11/15/2022

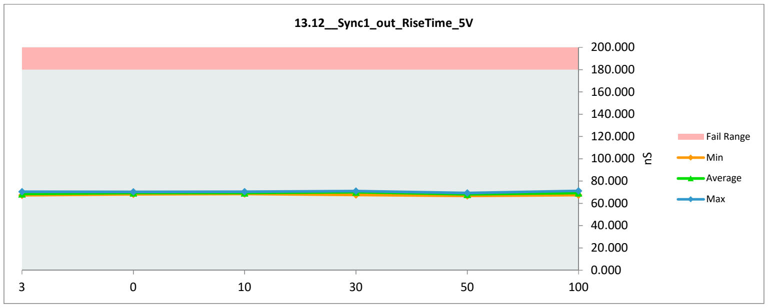
Assy Lot: 2517212

TPS7H4001-SHP

		13.12__Sync1_out_RiseTime_5V		
	Test Site	Junkins Lab- Dalla	Junkins Lab- Dallas	
	Tester	ETS364/FETS3641	ETS364/FETS36412	
	Test Number	EB588003	EB588003	
	Unit	nS	nS	
	Max Limit	180	180	
	Min Limit			
krad(Si)	Serial #	Pre Biased	Post Biased	Delta
100	1	69.414	68.821	-0.593
100	2	67.661	67.431	-0.230
100	3	71.867	71.192	-0.675
100	4	69.267	69.376	0.109
100	5	71.215	70.066	-1.149
100	6	70.637	70.342	-0.295
100	9	68.787	68.063	-0.724
100	10	70.413	69.065	-1.348
100	11	68.680	67.978	-0.702
100	12	69.972	70.497	0.525
100	13	69.648	69.333	-0.315
100	14	70.186	70.495	0.309
100	15	69.414	68.993	-0.421
100	16	70.185	69.647	-0.538
100	17	69.193	69.465	0.272
100	18	70.335	69.655	-0.680
100	19	70.094	70.086	-0.008
100	20	67.109	67.551	0.442
100	21	69.927	69.232	-0.695
100	22	68.998	69.118	0.120
100	23	70.179	70.016	-0.163
100	24	69.476	68.790	-0.686
50	36	68.109	67.272	-0.837
50	37	69.612	69.300	-0.312
50	38	69.800	68.755	-1.045
50	39	68.014	68.099	0.085
50	40	67.101	66.721	-0.380
30	46	71.324	70.892	-0.432
30	47	70.078	69.681	-0.397
30	48	67.817	67.597	-0.220
30	49	71.787	70.935	-0.852
30	50	71.785	70.780	-1.005
10	56	70.527	70.195	-0.332
10	57	69.789	68.680	-1.109
10	58	69.876	68.893	-0.983
10	59	68.826	68.409	-0.417
10	60	71.310	70.455	-0.855
3	66	68.511	67.276	-1.235
3	67	69.765	68.371	-1.394
3	68	68.491	67.813	-0.678
3	69	70.778	70.415	-0.363
3	70	69.155	68.490	-0.665
0	33	71.632	70.289	-1.343
0	34	68.931	68.198	-0.733
0	35	70.678	69.453	-1.225
	Max	71.867	71.192	0.525
	Average	69.697	69.160	-0.537
	Min	67.101	66.721	-1.394
	Std Dev	1.211	1.137	0.489



	13.12__Sync1_out_RiseTime_5					
Test Site	unkins Lab- Dallas					
Tester	TS364/FETS36412					
Test Number	EB588003					
Max Limit	180	nS				
Min Limit		nS				
krad(Si)	3	0	10	30	50	100
LL						
Min	67.276	68.198	68.409	67.597	66.721	67.431
Average	68.473	69.313	69.326	69.977	68.029	69.328
Max	70.415	70.289	70.455	70.935	69.300	71.192
UL	180.000	180.000	180.000	180.000	180.000	180.000



TID/HDR Biased Report

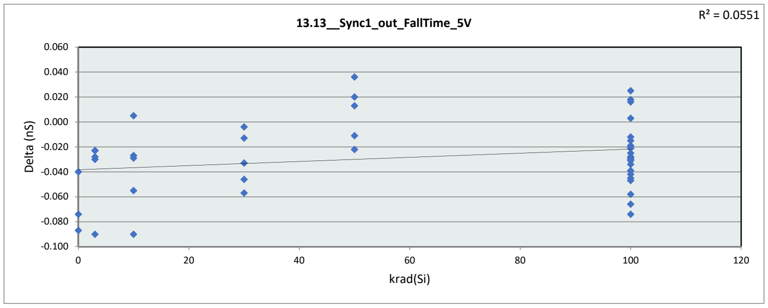
Die lot: 1087518 Exposure date: 11/15/2022

Assy Lot: 2517212

TPS7H4001-SHP

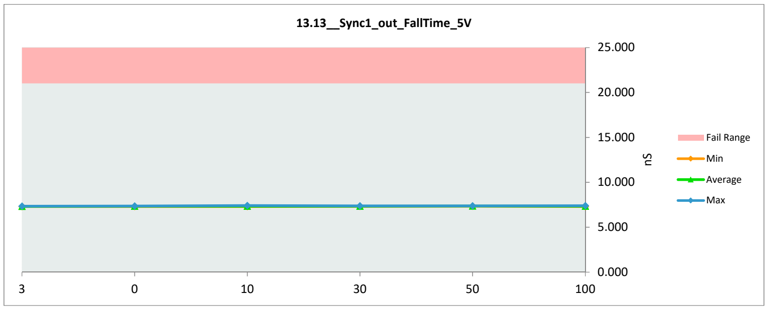
	13.13__Sync1_out_FallTime_5V	
Test Site	Junkins Lab- Dalla	Junkins Lab- Dallas
Tester	ETS364/FETS36412	ETS364/FETS36412
Test Number	EB588003	EB588003
Unit	nS	nS
Max Limit	21	21
Min Limit		

krad(Si)	Serial #	Pre Biased	Post Biased	Delta
100	1	7.380	7.351	-0.029
100	2	7.395	7.329	-0.066
100	3	7.356	7.337	-0.019
100	4	7.365	7.340	-0.025
100	5	7.367	7.320	-0.047
100	6	7.377	7.346	-0.031
100	9	7.348	7.309	-0.039
100	10	7.337	7.353	0.016
100	11	7.359	7.344	-0.015
100	12	7.357	7.323	-0.034
100	13	7.375	7.330	-0.045
100	14	7.373	7.352	-0.021
100	15	7.354	7.372	0.018
100	16	7.343	7.346	0.003
100	17	7.395	7.383	-0.012
100	18	7.358	7.337	-0.021
100	19	7.413	7.339	-0.074
100	20	7.369	7.339	-0.030
100	21	7.380	7.322	-0.058
100	22	7.387	7.359	-0.028
100	23	7.408	7.366	-0.042
100	24	7.358	7.383	0.025
50	36	7.373	7.362	-0.011
50	37	7.336	7.356	0.020
50	38	7.386	7.364	-0.022
50	39	7.328	7.341	0.013
50	40	7.314	7.350	0.036
30	46	7.374	7.370	-0.004
30	47	7.373	7.316	-0.057
30	48	7.323	7.310	-0.013
30	49	7.354	7.321	-0.033
30	50	7.390	7.344	-0.046
10	56	7.403	7.408	0.005
10	57	7.364	7.309	-0.055
10	58	7.367	7.338	-0.029
10	59	7.373	7.346	-0.027
10	60	7.388	7.298	-0.090
3	66	7.347	7.319	-0.028
3	67	7.392	7.302	-0.090
3	68	7.338	7.315	-0.023
3	69	7.361	7.331	-0.030
3	70	7.341	7.318	-0.023
0	33	7.388	7.348	-0.040
0	34	7.377	7.303	-0.074
0	35	7.426	7.339	-0.087
	Max	7.426	7.408	0.036
	Average	7.368	7.340	-0.028
	Min	7.314	7.298	-0.090
	Std Dev	0.024	0.024	0.030



	13.13__Sync1_out_FallTime_5	
Test Site	unkins Lab- Dallas	
Tester	TS364/FETS36412	
Test Number	EB588003	
Max Limit	21	nS
Min Limit		nS

krad(Si)	3	0	10	30	50	100
LL						
Min	7.302	7.303	7.298	7.310	7.341	7.309
Average	7.317	7.330	7.340	7.332	7.355	7.345
Max	7.331	7.348	7.408	7.370	7.364	7.383
UL	21.000	21.000	21.000	21.000	21.000	21.000



TID/HDR Biased Report

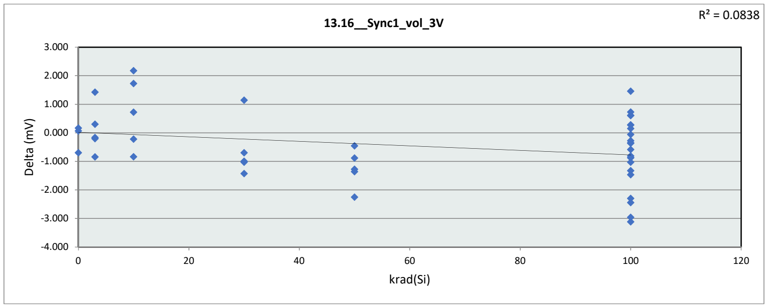
Die lot: 1087518

Exposure date: 11/15/2022

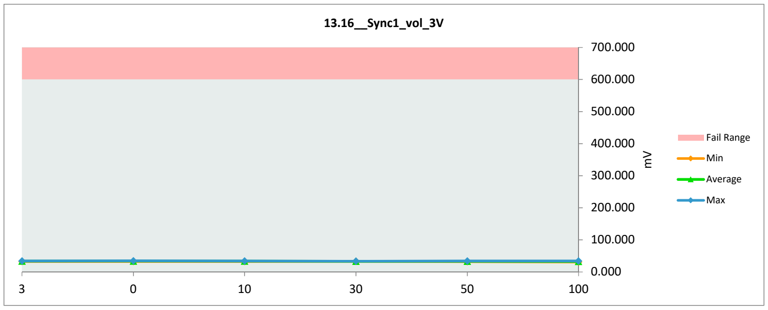
Assy Lot: 2517212

TPS7H4001-SHP

		13.16__Sync1_vol_3V		
	Test Site	Junkins Lab- Dalla	Junkins Lab- Dallas	
	Tester	ETS364/FETS3641	ETS364/FETS36412	
	Test Number	EB588003	EB588003	
	Unit	mV	mV	
	Max Limit	600	600	
	Min Limit			
krad(Si)	Serial #	Pre Biased	Post Biased	Delta
100	1	34.433	34.067	-0.366
100	2	32.801	33.527	0.726
100	3	36.354	33.238	-3.116
100	4	33.598	33.322	-0.276
100	5	34.733	31.776	-2.957
100	6	33.202	30.906	-2.296
100	9	34.080	33.210	-0.870
100	10	32.746	33.353	0.607
100	11	32.998	32.127	-0.871
100	12	32.836	31.807	-1.029
100	13	33.652	32.187	-1.465
100	14	32.906	33.058	0.152
100	15	33.022	32.670	-0.352
100	16	33.767	32.956	-0.811
100	17	32.818	33.430	0.612
100	18	34.301	31.857	-2.444
100	19	33.094	31.767	-1.327
100	20	33.434	32.850	-0.584
100	21	31.611	33.070	1.459
100	22	32.577	32.518	-0.059
100	23	32.620	32.902	0.282
100	24	32.521	32.794	0.273
50	36	33.773	32.500	-1.273
50	37	35.484	33.232	-2.252
50	38	33.583	32.223	-1.360
50	39	33.148	32.266	-0.882
50	40	34.484	34.030	-0.454
30	46	34.397	32.968	-1.429
30	47	33.610	32.914	-0.696
30	48	33.956	32.962	-0.994
30	49	34.403	33.376	-1.027
30	50	32.210	33.352	1.142
10	56	32.290	34.019	1.729
10	57	33.627	33.406	-0.221
10	58	33.403	34.123	0.720
10	59	33.304	32.464	-0.840
10	60	32.130	34.307	2.177
3	66	33.397	33.701	0.304
3	67	32.583	34.005	1.422
3	68	32.566	32.362	-0.204
3	69	33.105	32.943	-0.162
3	70	34.931	34.085	-0.846
0	33	34.484	34.651	0.167
0	34	33.279	32.583	-0.696
0	35	34.019	34.085	0.066
	Max	36.354	34.651	2.177
	Average	33.473	33.021	-0.452
	Min	31.611	30.906	-3.116
	Std Dev	0.930	0.802	1.165



	13.16__Sync1_vol_3V					
Test Site	unkins Lab- Dallas					
Tester	TS364/FETS36412					
Test Number	EB588003					
Max Limit	600	mV				
Min Limit		mV				
krad(Si)	3	0	10	30	50	100
LL						
Min	32.362	32.583	32.464	32.914	32.223	30.906
Average	33.419	33.773	33.664	33.114	32.850	32.700
Max	34.085	34.651	34.307	33.376	34.030	34.067
UL	600.000	600.000	600.000	600.000	600.000	600.000



TID/HDR Biased Report

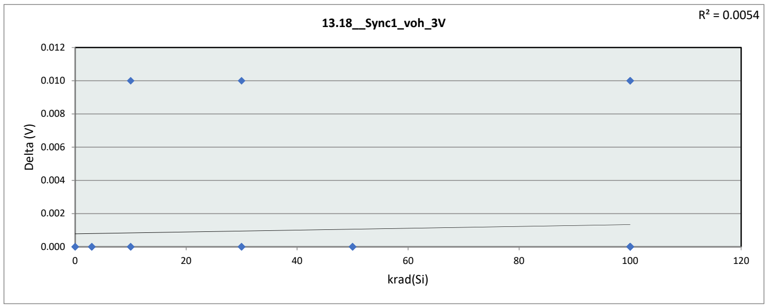
Die lot: 1087518

Exposure date: 11/15/2022

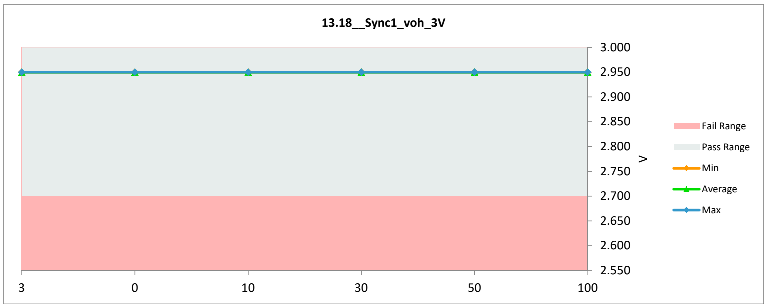
Assy Lot: 2517212

TPS7H4001-SHP

		13.18__Sync1_voh_3V		
	Test Site	Junkins Lab- Dalla	Junkins Lab- Dallas	
	Tester	ETS364/FETS3641	ETS364/FETS36412	
	Test Number	EB588003	EB588003	
	Unit	V	V	
	Max Limit			
	Min Limit	2.7	2.7	
krad(Si)	Serial #	Pre Biased	Post Biased	Delta
100	1	2.950	2.950	0.000
100	2	2.950	2.950	0.000
100	3	2.950	2.950	0.000
100	4	2.940	2.950	0.010
100	5	2.950	2.950	0.000
100	6	2.950	2.950	0.000
100	9	2.950	2.950	0.000
100	10	2.940	2.950	0.010
100	11	2.950	2.950	0.000
100	12	2.950	2.950	0.000
100	13	2.950	2.950	0.000
100	14	2.940	2.950	0.010
100	15	2.950	2.950	0.000
100	16	2.950	2.950	0.000
100	17	2.950	2.950	0.000
100	18	2.950	2.950	0.000
100	19	2.950	2.950	0.000
100	20	2.950	2.950	0.000
100	21	2.950	2.950	0.000
100	22	2.950	2.950	0.000
100	23	2.950	2.950	0.000
100	24	2.950	2.950	0.000
50	36	2.950	2.950	0.000
50	37	2.950	2.950	0.000
50	38	2.950	2.950	0.000
50	39	2.950	2.950	0.000
50	40	2.950	2.950	0.000
30	46	2.950	2.950	0.000
30	47	2.950	2.950	0.000
30	48	2.950	2.950	0.000
30	49	2.940	2.950	0.010
30	50	2.950	2.950	0.000
10	56	2.950	2.950	0.000
10	57	2.950	2.950	0.000
10	58	2.940	2.950	0.010
10	59	2.950	2.950	0.000
10	60	2.950	2.950	0.000
3	66	2.950	2.950	0.000
3	67	2.950	2.950	0.000
3	68	2.950	2.950	0.000
3	69	2.950	2.950	0.000
3	70	2.950	2.950	0.000
0	33	2.950	2.950	0.000
0	34	2.950	2.950	0.000
0	35	2.950	2.950	0.000
	Max	2.950	2.950	0.010
	Average	2.949	2.950	0.001
	Min	2.940	2.950	0.000
	Std Dev	0.003	0.000	0.003



	13.18__Sync1_voh_3V					
Test Site	unkins Lab- Dallas					
Tester	TS364/FETS36412					
Test Number	EB588003					
Max Limit		V				
Min Limit	2.7	V				
krad(Si)	3	0	10	30	50	100
LL	2.700	2.700	2.700	2.700	2.700	2.700
Min	2.950	2.950	2.950	2.950	2.950	2.950
Average	2.950	2.950	2.950	2.950	2.950	2.950
Max	2.950	2.950	2.950	2.950	2.950	2.950
UL						



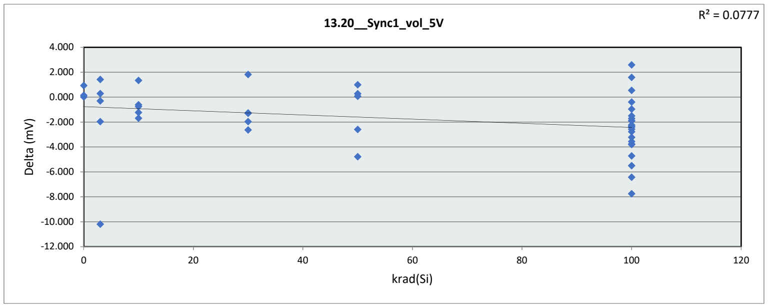
TID/HDR Biased Report

Die lot: 1087518 Exposure date: 11/15/2022

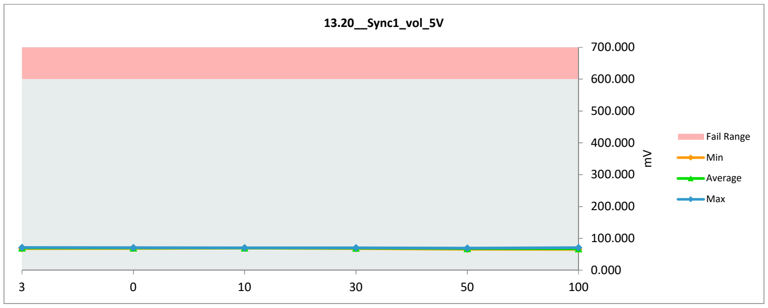
Assy Lot: 2517212

TPS7H4001-SHP

		13.20__Sync1_vol_5V		
	Test Site	Junkins Lab- Dalla	Junkins Lab- Dallas	
	Tester	ETS364/FETS36412	ETS364/FETS36412	
	Test Number	EB588003	EB588003	
	Unit	mV	mV	
	Max Limit	600	600	
	Min Limit			
krad(Si)	Serial #	Pre Biased	Post Biased	Delta
100	1	71.595	69.359	-2.236
100	2	69.334	67.613	-1.721
100	3	69.085	67.191	-1.894
100	4	72.859	66.434	-6.425
100	5	71.472	69.148	-2.324
100	6	68.936	66.536	-2.400
100	9	71.670	67.868	-3.802
100	10	69.064	66.502	-2.562
100	11	70.725	66.967	-3.758
100	12	71.069	66.350	-4.719
100	13	73.918	66.170	-7.748
100	14	68.464	66.957	-1.507
100	15	70.679	65.179	-5.500
100	16	70.085	66.861	-3.224
100	17	67.601	67.209	-0.392
100	18	68.210	70.793	2.583
100	19	69.118	67.221	-1.897
100	20	70.133	66.572	-3.561
100	21	67.791	66.831	-0.960
100	22	70.446	67.669	-2.777
100	23	68.458	70.048	1.590
100	24	65.918	66.464	0.546
50	36	68.377	69.370	0.993
50	37	71.298	68.710	-2.588
50	38	70.847	66.067	-4.780
50	39	66.645	66.707	0.062
50	40	68.967	69.238	0.271
30	46	70.457	69.166	-1.291
30	47	69.370	68.104	-1.266
30	48	68.632	70.451	1.819
30	49	71.886	69.918	-1.968
30	50	70.831	68.200	-2.631
10	56	70.511	69.761	-0.750
10	57	69.070	70.415	1.345
10	58	71.868	70.179	-1.689
10	59	69.893	69.278	-0.615
10	60	70.685	69.454	-1.231
3	66	69.762	67.794	-1.968
3	67	79.691	69.496	-10.195
3	68	69.582	69.868	0.286
3	69	69.412	70.837	1.425
3	70	71.640	71.340	-0.300
0	33	69.905	69.923	0.018
0	34	68.278	68.427	0.149
0	35	69.707	70.638	0.931
	Max	79.691	71.340	2.583
	Average	70.088	68.340	-1.748
	Min	65.918	65.179	-10.195
	Std Dev	2.141	1.623	2.556



	13.20__Sync1_vol_5V					
Test Site	unkins Lab- Dallas					
Tester	TS364/FETS36412					
Test Number	EB588003					
Max Limit	600	mV				
Min Limit		mV				
krad(Si)	3	0	10	30	50	100
LL						
Min	67.794	68.427	69.278	68.104	66.067	65.179
Average	69.867	69.663	69.817	69.168	68.018	67.361
Max	71.340	70.638	70.415	70.451	69.370	70.793
UL	600.000	600.000	600.000	600.000	600.000	600.000



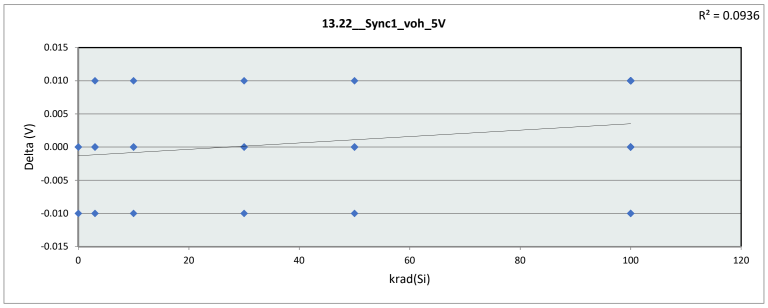
TID/HDR Biased Report

Die lot: 1087518 Exposure date: 11/15/2022

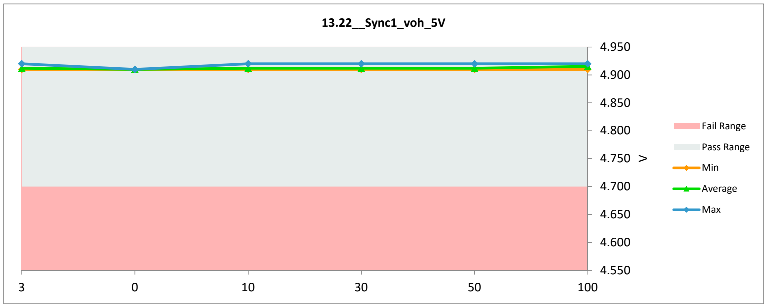
Assy Lot: 2517212

TPS7H4001-SHP

		13.22__Sync1_voh_5V		
	Test Site	Junkins Lab- Dalla	Junkins Lab- Dallas	
	Tester	ETS364/FETS3641	ETS364/FETS36412	
	Test Number	EB588003	EB588003	
	Unit	V	V	
	Max Limit			
	Min Limit	4.7	4.7	
krad(Si)	Serial #	Pre Biased	Post Biased	Delta
100	1	4.910	4.920	0.010
100	2	4.910	4.910	0.000
100	3	4.910	4.920	0.010
100	4	4.910	4.910	0.000
100	5	4.910	4.910	0.000
100	6	4.910	4.920	0.010
100	9	4.910	4.920	0.010
100	10	4.910	4.920	0.010
100	11	4.910	4.920	0.010
100	12	4.910	4.910	0.000
100	13	4.910	4.910	0.000
100	14	4.910	4.920	0.010
100	15	4.910	4.920	0.010
100	16	4.910	4.910	0.000
100	17	4.910	4.920	0.010
100	18	4.920	4.920	0.000
100	19	4.910	4.910	0.000
100	20	4.910	4.920	0.010
100	21	4.920	4.910	-0.010
100	22	4.910	4.910	0.000
100	23	4.920	4.910	-0.010
100	24	4.920	4.920	0.000
50	36	4.910	4.920	0.010
50	37	4.920	4.910	-0.010
50	38	4.910	4.910	0.000
50	39	4.910	4.910	0.000
50	40	4.910	4.910	0.000
30	46	4.910	4.910	0.000
30	47	4.910	4.910	0.000
30	48	4.910	4.920	0.010
30	49	4.920	4.910	-0.010
30	50	4.910	4.910	0.000
10	56	4.910	4.910	0.000
10	57	4.910	4.910	0.000
10	58	4.910	4.910	0.000
10	59	4.920	4.910	-0.010
10	60	4.910	4.920	0.010
3	66	4.910	4.910	0.000
3	67	4.910	4.910	0.000
3	68	4.910	4.910	0.000
3	69	4.910	4.920	0.010
3	70	4.920	4.910	-0.010
0	33	4.910	4.910	0.000
0	34	4.920	4.910	-0.010
0	35	4.910	4.910	0.000
	Max	4.920	4.920	0.010
	Average	4.912	4.914	0.002
	Min	4.910	4.910	-0.010
	Std Dev	0.004	0.005	0.007



	13.22__Sync1_voh_5V					
Test Site	unkins Lab- Dallas					
Tester	TS364/FETS36412					
Test Number	EB588003					
Max Limit		V				
Min Limit	4.7	V				
krad(Si)	3	0	10	30	50	100
LL	4.700	4.700	4.700	4.700	4.700	4.700
Min	4.910	4.910	4.910	4.910	4.910	4.910
Average	4.912	4.910	4.912	4.912	4.912	4.915
Max	4.920	4.910	4.920	4.920	4.920	4.920
UL						



TID/HDR Biased Report

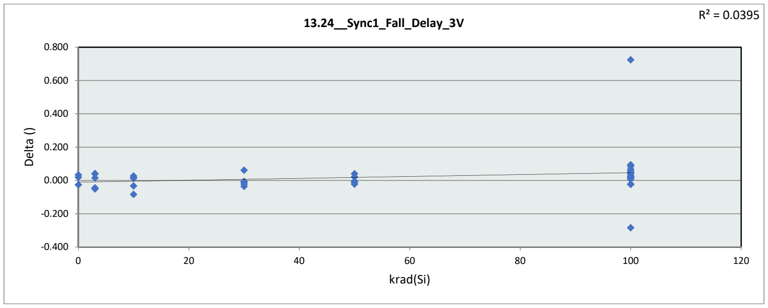
Die lot: 1087518

Exposure date: 11/15/2022

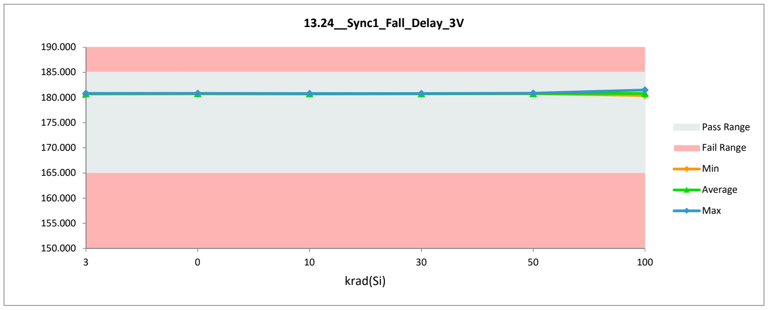
Assy Lot: 2517212

TPS7H4001-SHP

		13.24__Sync1_Fall_Delay_3V		
	Test Site	Junkins Lab- Dalla	Junkins Lab- Dallas	
	Tester	ETS364/FETS3641	ETS364/FETS36412	
	Test Number	EB588003	EB588003	
	Unit			
	Max Limit	185	185	
	Min Limit	165	165	
krad(Si)	Serial #	Pre Biased	Post Biased	Delta
100	1	180.819	180.903	0.084
100	2	180.689	180.716	0.027
100	3	180.752	180.801	0.049
100	4	180.784	180.803	0.019
100	5	180.697	180.413	-0.284
100	6	180.842	180.819	-0.023
100	9	180.785	180.850	0.065
100	10	180.815	180.835	0.020
100	11	180.792	180.807	0.015
100	12	180.735	180.829	0.094
100	13	180.794	181.518	0.724
100	14	180.798	180.775	-0.023
100	15	180.757	180.804	0.047
100	16	180.788	180.837	0.049
100	17	180.809	180.815	0.006
100	18	180.744	180.769	0.025
100	19	180.810	180.826	0.016
100	20	180.789	180.826	0.037
100	21	180.747	180.812	0.065
100	22	180.817	180.795	-0.022
100	23	180.738	180.762	0.024
100	24	180.794	180.847	0.053
50	36	180.817	180.795	-0.022
50	37	180.766	180.761	-0.005
50	38	180.765	180.805	0.040
50	39	180.798	180.785	-0.013
50	40	180.837	180.858	0.021
30	46	180.759	180.820	0.061
30	47	180.774	180.762	-0.012
30	48	180.775	180.769	-0.006
30	49	180.758	180.736	-0.022
30	50	180.769	180.733	-0.036
10	56	180.809	180.725	-0.084
10	57	180.767	180.784	0.017
10	58	180.805	180.818	0.013
10	59	180.783	180.810	0.027
10	60	180.773	180.740	-0.033
3	66	180.791	180.830	0.039
3	67	180.725	180.766	0.041
3	68	180.765	180.714	-0.051
3	69	180.828	180.783	-0.045
3	70	180.786	180.801	0.015
0	33	180.785	180.759	-0.026
0	34	180.771	180.790	0.019
0	35	180.812	180.845	0.033
	Max	180.842	181.518	0.724
	Average	180.780	180.803	0.023
	Min	180.689	180.413	-0.284
	Std Dev	0.033	0.129	0.121



	13.24__Sync1_Fall_Delay_3V					
Test Site	unkins Lab- Dallas					
Tester	TS364/FETS36412					
Test Number	EB588003					
Max Limit	185					
Min Limit	165					
krad(Si)	3	0	10	30	50	100
LL	165.000	165.000	165.000	165.000	165.000	165.000
Min	180.714	180.759	180.725	180.733	180.761	180.413
Average	180.779	180.798	180.775	180.764	180.801	180.826
Max	180.830	180.845	180.818	180.820	180.858	181.518
UL	185.000	185.000	185.000	185.000	185.000	185.000



TID/HDR Biased Report

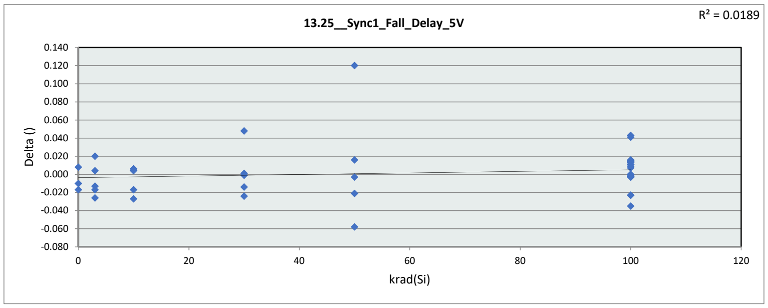
Die lot: 1087518

Exposure date: 11/15/2022

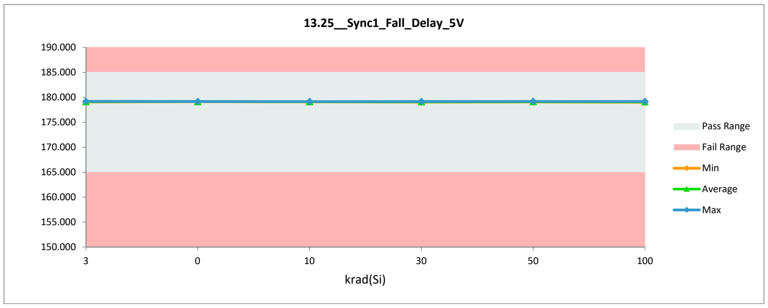
Assy Lot: 2517212

TPS7H4001-SHP

		13.25__Sync1_Fall_Delay_5V		
	Test Site	Junkins Lab- Dalla	Junkins Lab- Dallas	
	Tester	ETS364/FETS3641	ETS364/FETS36412	
	Test Number	EB588003	EB588003	
	Unit			
	Max Limit	185	185	
	Min Limit	165	165	
krad(Si)	Serial #	Pre Biased	Post Biased	Delta
100	1	179.093	179.136	0.043
100	2	179.080	179.045	-0.035
100	3	179.102	179.117	0.015
100	4	179.125	179.123	-0.002
100	5	179.028	179.005	-0.023
100	6	179.066	179.075	0.009
100	9	179.155	179.155	0.000
100	10	179.083	179.081	-0.002
100	11	179.118	179.116	-0.002
100	12	179.074	179.071	-0.003
100	13	179.135	179.133	-0.002
100	14	179.118	179.159	0.041
100	15	179.036	179.013	-0.023
100	16	179.112	179.125	0.013
100	17	179.035	179.042	0.007
100	18	179.067	179.065	-0.002
100	19	179.096	179.107	0.011
100	20	179.090	179.090	0.000
100	21	179.029	179.043	0.014
100	22	179.130	179.127	-0.003
100	23	179.029	179.045	0.016
100	24	179.100	179.111	0.011
50	36	179.113	179.129	0.016
50	37	179.036	179.156	0.120
50	38	179.098	179.077	-0.021
50	39	179.131	179.073	-0.058
50	40	179.183	179.180	-0.003
30	46	179.166	179.165	-0.001
30	47	179.089	179.065	-0.024
30	48	179.125	179.173	0.048
30	49	179.095	179.096	0.001
30	50	179.052	179.038	-0.014
10	56	179.144	179.148	0.004
10	57	179.140	179.146	0.006
10	58	179.117	179.090	-0.027
10	59	179.165	179.148	-0.017
10	60	179.108	179.114	0.006
3	66	179.190	179.194	0.004
3	67	179.102	179.122	0.020
3	68	179.091	179.078	-0.013
3	69	179.127	179.101	-0.026
3	70	179.116	179.099	-0.017
0	33	179.158	179.148	-0.010
0	34	179.110	179.118	0.008
0	35	179.178	179.161	-0.017
	Max	179.190	179.194	0.120
	Average	179.105	179.107	0.002
	Min	179.028	179.005	-0.058
	Std Dev	0.042	0.046	0.027



	13.25__Sync1_Fall_Delay_5V					
Test Site	unkins Lab- Dallas					
Tester	TS364/FETS36412					
Test Number	EB588003					
Max Limit	185					
Min Limit	165					
krad(Si)	3	0	10	30	50	100
LL	165.000	165.000	165.000	165.000	165.000	165.000
Min	179.078	179.118	179.090	179.038	179.073	179.005
Average	179.119	179.142	179.129	179.107	179.123	179.090
Max	179.194	179.161	179.148	179.173	179.180	179.159
UL	185.000	185.000	185.000	185.000	185.000	185.000



TID/HDR Biased Report

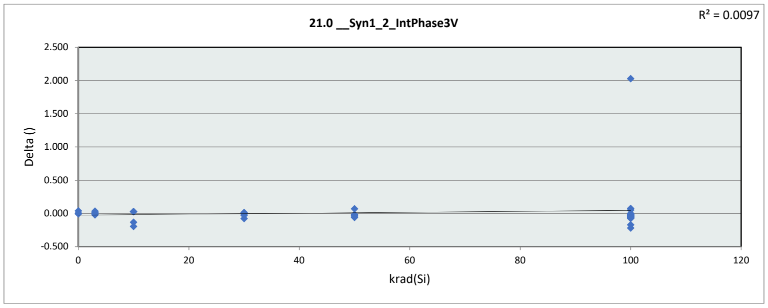
Die lot: 1087518 Exposure date: 11/15/2022

Assy Lot: 2517212

TPS7H4001-SHP

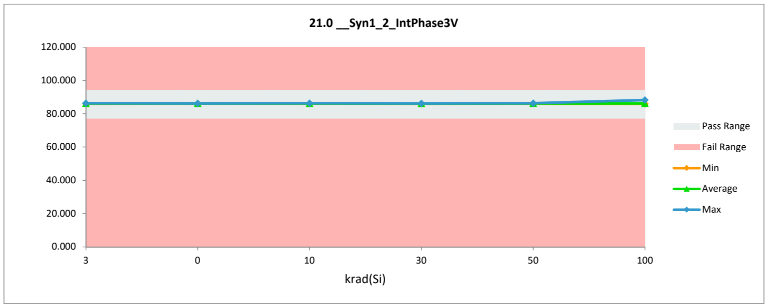
	21.0 __Syn1_2_IntPhase3V	
Test Site	Junkins Lab- Dalla	Junkins Lab- Dallas
Tester	ETS364/FETS3641	ETS364/FETS36412
Test Number	EB588003	EB588003
Unit		
Max Limit	94	94
Min Limit	77	77

krad(Si)	Serial #	Pre Biased	Post Biased	Delta
100	1	86.231	86.168	-0.063
100	2	86.166	86.097	-0.069
100	3	86.187	86.150	-0.037
100	4	86.243	86.199	-0.044
100	5	86.116	86.066	-0.050
100	6	86.175	86.156	-0.019
100	9	86.297	86.271	-0.026
100	10	85.981	86.056	0.075
100	11	86.269	86.228	-0.041
100	12	86.109	86.094	-0.015
100	13	86.196	88.225	2.029
100	14	86.206	86.035	-0.171
100	15	86.071	85.996	-0.075
100	16	86.186	86.172	-0.014
100	17	86.039	86.011	-0.028
100	18	85.987	86.038	0.051
100	19	86.125	86.125	0.000
100	20	86.187	86.129	-0.058
100	21	86.021	85.965	-0.056
100	22	86.202	85.983	-0.219
100	23	86.029	85.986	-0.043
100	24	86.148	86.125	-0.023
50	36	86.274	86.232	-0.042
50	37	86.201	86.187	-0.014
50	38	86.033	86.102	0.069
50	39	86.228	86.168	-0.060
50	40	86.327	86.297	-0.030
30	46	86.264	86.235	-0.029
30	47	86.110	86.100	-0.010
30	48	86.265	86.271	0.006
30	49	86.256	86.180	-0.076
30	50	86.019	86.033	0.014
10	56	86.317	86.121	-0.196
10	57	86.279	86.146	-0.133
10	58	86.170	86.199	0.029
10	59	86.312	86.339	0.027
10	60	86.194	86.220	0.026
3	66	86.314	86.349	0.035
3	67	86.078	86.068	-0.010
3	68	86.186	86.199	0.013
3	69	86.162	86.164	0.002
3	70	86.273	86.251	-0.022
0	33	86.165	86.169	0.004
0	34	86.191	86.183	-0.008
0	35	86.222	86.260	0.038
	Max	86.327	88.225	2.029
	Average	86.178	86.194	0.016
	Min	85.981	85.965	-0.219
	Std Dev	0.094	0.324	0.313



	21.0 __Syn1_2_IntPhase3V
Test Site	unkins Lab- Dallas
Tester	TS364/FETS36412
Test Number	EB588003
Max Limit	94
Min Limit	77

krad(Si)	3	0	10	30	50	100
LL	77.000	77.000	77.000	77.000	77.000	77.000
Min	86.068	86.169	86.121	86.033	86.102	85.965
Average	86.206	86.204	86.205	86.164	86.197	86.194
Max	86.349	86.260	86.339	86.271	86.297	88.225
UL	94.000	94.000	94.000	94.000	94.000	94.000



TID/HDR Biased Report

Die lot: 1087518

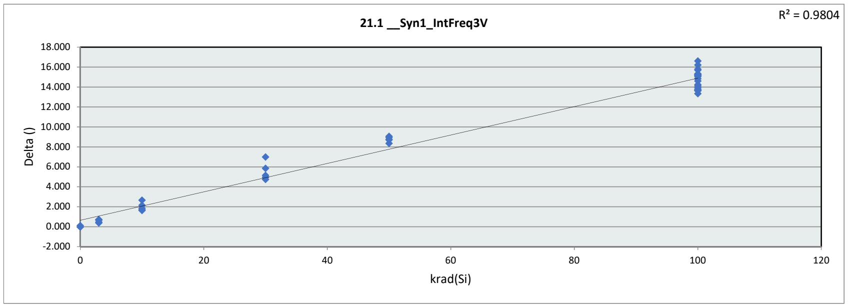
Exposure date: 11/15/2022

Assy Lot: 2517212

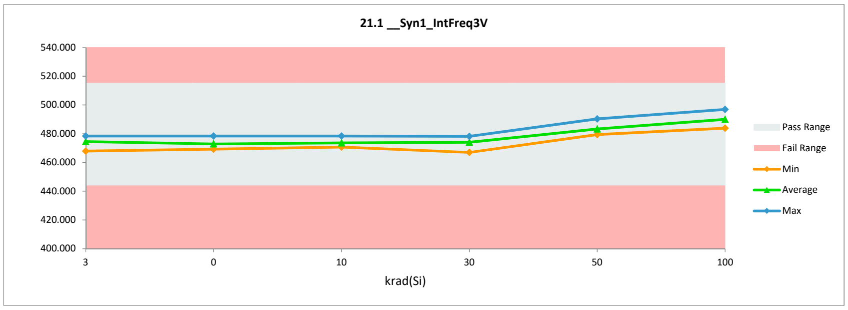
TPS7H4001-SHP

	21.1 ___Syn1_IntFreq3V	
Test Site	Junkins Lab- Dalla	Junkins Lab- Dallas
Tester	ETS364/FETS3641	ETS364/FETS36412
Test Number	EB588003	EB588003
Unit		
Max Limit	515	515
Min Limit	444	444

krad(Si)	Serial #	Pre Biased	Post Biased	Delta
100	1	472.602	488.296	15.694
100	2	477.945	493.153	15.208
100	3	470.027	485.183	15.156
100	4	471.119	487.726	16.607
100	5	468.502	483.828	15.326
100	6	476.370	490.082	13.712
100	9	472.126	487.335	15.209
100	10	479.311	494.572	15.261
100	11	477.370	493.580	16.210
100	12	474.419	488.528	14.109
100	13	481.493	495.179	13.686
100	14	472.523	486.273	13.750
100	15	478.552	494.340	15.788
100	16	476.180	489.801	13.621
100	17	479.077	492.739	13.662
100	18	472.849	487.678	14.829
100	19	476.365	490.603	14.238
100	20	477.978	492.578	14.600
100	21	481.837	496.881	15.044
100	22	473.661	486.995	13.334
100	23	471.581	485.490	13.909
100	24	474.323	489.499	15.176
50	36	471.648	479.997	8.349
50	37	470.466	479.412	8.946
50	38	477.493	486.550	9.057
50	39	481.612	490.368	8.756
50	40	471.707	480.417	8.710
30	46	465.193	471.042	5.849
30	47	472.992	478.143	5.151
30	48	472.365	477.317	4.952
30	49	459.978	466.974	6.996
30	50	472.114	476.858	4.744
10	56	470.643	472.267	1.624
10	57	476.518	478.359	1.841
10	58	473.097	474.788	1.691
10	59	469.227	471.891	2.664
10	60	468.582	470.721	2.139
3	66	475.341	476.054	0.713
3	67	473.615	473.994	0.379
3	68	477.733	478.429	0.696
3	69	475.533	475.993	0.460
3	70	467.292	467.948	0.656
0	33	469.243	469.242	-0.001
0	34	478.429	478.396	-0.033
0	35	470.899	471.008	0.109
	Max	481.837	496.881	16.607
	Average	473.732	482.811	9.079
	Min	459.978	466.974	-0.033
	Std Dev	4.466	8.538	6.119



	21.1 ___Syn1_IntFreq3V					
Test Site	unkins Lab- Dallas					
Tester	TS364/FETS36412					
Test Number	EB588003					
Max Limit	515					
Min Limit	444					
krad(Si)	3	0	10	30	50	100
LL	444.000	444.000	444.000	444.000	444.000	444.000
Min	467.948	469.242	470.721	466.974	479.412	483.828
Average	474.484	472.882	473.605	474.067	483.349	490.015
Max	478.429	478.396	478.359	478.143	490.368	496.881
UL	515.000	515.000	515.000	515.000	515.000	515.000



TID/HDR Biased Report

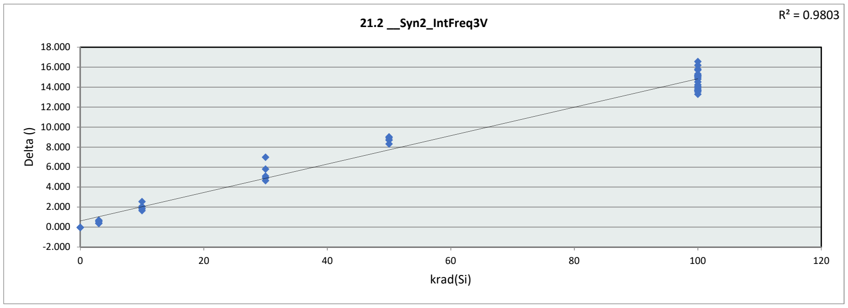
Die lot: 1087518

Exposure date: 11/15/2022

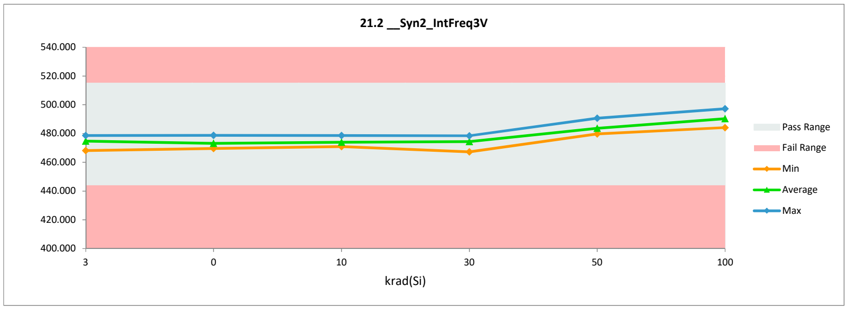
Assy Lot: 2517212

TPS7H4001-SHP

		21.2 __Syn2_IntFreq3V		
	Test Site	Junkins Lab- Dalla	Junkins Lab- Dallas	
	Tester	ETS364/FETS3641	ETS364/FETS36412	
	Test Number	EB588003	EB588003	
	Unit			
	Max Limit	515	515	
	Min Limit	444	444	
krad(Si)	Serial #	Pre Biased	Post Biased	Delta
100	1	472.890	488.694	15.804
100	2	478.335	493.516	15.181
100	3	470.407	485.522	15.115
100	4	471.525	488.091	16.566
100	5	468.825	484.129	15.304
100	6	476.768	490.427	13.659
100	9	472.559	487.656	15.097
100	10	479.729	494.832	15.103
100	11	477.752	493.939	16.187
100	12	474.790	488.858	14.068
100	13	481.901	495.636	13.735
100	14	472.922	486.578	13.656
100	15	478.937	494.652	15.715
100	16	476.538	490.065	13.527
100	17	479.423	493.131	13.708
100	18	473.237	488.036	14.799
100	19	476.728	490.965	14.237
100	20	478.338	492.866	14.528
100	21	482.266	497.209	14.943
100	22	474.049	487.341	13.292
100	23	471.958	485.851	13.893
100	24	474.703	489.810	15.107
50	36	471.993	480.315	8.322
50	37	470.793	479.718	8.925
50	38	477.861	486.887	9.026
50	39	482.001	490.718	8.717
50	40	472.003	480.713	8.710
30	46	465.559	471.356	5.797
30	47	473.356	478.443	5.087
30	48	472.708	477.627	4.919
30	49	460.242	467.229	6.987
30	50	472.494	477.139	4.645
10	56	470.773	472.597	1.824
10	57	476.813	478.669	1.856
10	58	473.465	475.104	1.639
10	59	469.589	472.130	2.541
10	60	468.900	470.971	2.071
3	66	475.671	476.295	0.624
3	67	473.931	474.295	0.364
3	68	478.109	478.645	0.536
3	69	475.902	476.286	0.384
3	70	467.511	468.198	0.687
0	33	469.596	469.554	-0.042
0	34	478.751	478.721	-0.030
0	35	471.244	471.185	-0.059
	Max	482.266	497.209	16.566
	Average	474.085	483.124	9.039
	Min	460.242	467.229	-0.059
	Std Dev	4.491	8.568	6.120



	21.2 __Syn2_IntFreq3V					
Test Site	unkins Lab- Dallas					
Tester	TS364/FETS36412					
Test Number	EB588003					
Max Limit	515					
Min Limit	444					
krad(Si)	3	0	10	30	50	100
LL	444.000	444.000	444.000	444.000	444.000	444.000
Min	468.198	469.554	470.971	467.229	479.718	484.129
Average	474.744	473.153	473.894	474.359	483.670	490.355
Max	478.645	478.721	478.669	478.443	490.718	497.209
UL	515.000	515.000	515.000	515.000	515.000	515.000



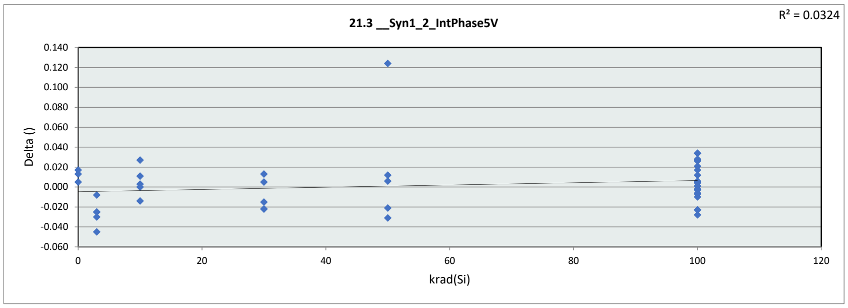
TID/HDR Biased Report

Die lot: 1087518 Exposure date: 11/15/2022

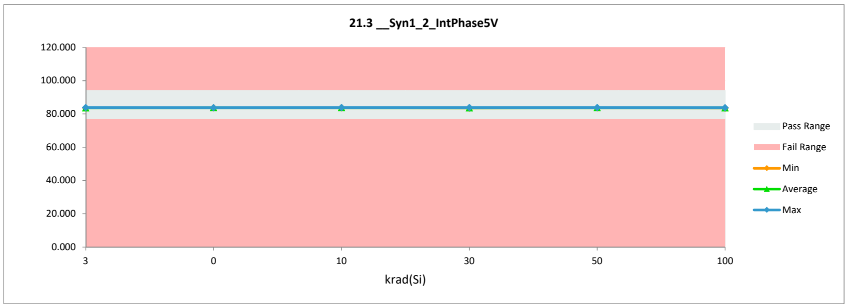
Assy Lot: 2517212

TPS7H4001-SHP

		21.3 __Syn1_2_IntPhase5V		
	Test Site	Junkins Lab- Dalla	Junkins Lab- Dallas	
	Tester	ETS364/FETS3641	ETS364/FETS36412	
	Test Number	EB588003	EB588003	
	Unit			
	Max Limit	94	94	
	Min Limit	77	77	
krad(Si)	Serial #	Pre Biased	Post Biased	Delta
100	1	83.690	83.717	0.027
100	2	83.656	83.654	-0.002
100	3	83.675	83.709	0.034
100	4	83.712	83.718	0.006
100	5	83.613	83.590	-0.023
100	6	83.645	83.643	-0.002
100	9	83.757	83.747	-0.010
100	10	83.608	83.605	-0.003
100	11	83.731	83.703	-0.028
100	12	83.603	83.604	0.001
100	13	83.683	83.717	0.034
100	14	83.763	83.784	0.021
100	15	83.616	83.610	-0.006
100	16	83.651	83.668	0.017
100	17	83.589	83.582	-0.007
100	18	83.580	83.585	0.005
100	19	83.648	83.676	0.028
100	20	83.741	83.718	-0.023
100	21	83.622	83.626	0.004
100	22	83.675	83.676	0.001
100	23	83.577	83.589	0.012
100	24	83.673	83.699	0.026
50	36	83.745	83.724	-0.021
50	37	83.671	83.795	0.124
50	38	83.657	83.663	0.006
50	39	83.706	83.675	-0.031
50	40	83.802	83.814	0.012
30	46	83.795	83.808	0.013
30	47	83.660	83.638	-0.022
30	48	83.810	83.788	-0.022
30	49	83.647	83.632	-0.015
30	50	83.573	83.578	0.005
10	56	83.731	83.742	0.011
10	57	83.817	83.817	0.000
10	58	83.639	83.642	0.003
10	59	83.794	83.780	-0.014
10	60	83.686	83.713	0.027
3	66	83.814	83.806	-0.008
3	67	83.633	83.608	-0.025
3	68	83.725	83.700	-0.025
3	69	83.713	83.668	-0.045
3	70	83.727	83.697	-0.030
0	33	83.726	83.743	0.017
0	34	83.680	83.685	0.005
0	35	83.729	83.742	0.013
	Max	83.817	83.817	0.124
	Average	83.689	83.691	0.002
	Min	83.573	83.578	-0.045
	Std Dev	0.068	0.070	0.027



	21.3 __Syn1_2_IntPhase5V					
Test Site	unkins Lab- Dallas					
Tester	TS364/FETS36412					
Test Number	EB588003					
Max Limit	94					
Min Limit	77					
krad(Si)	3	0	10	30	50	100
LL	77.000	77.000	77.000	77.000	77.000	77.000
Min	83.608	83.685	83.642	83.578	83.663	83.582
Average	83.696	83.723	83.739	83.689	83.734	83.665
Max	83.806	83.743	83.817	83.808	83.814	83.784
UL	94.000	94.000	94.000	94.000	94.000	94.000



TID/HDR Biased Report

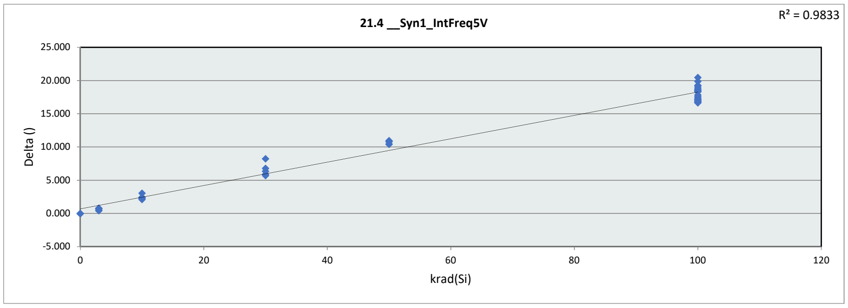
Die lot: 1087518

Exposure date: 11/15/2022

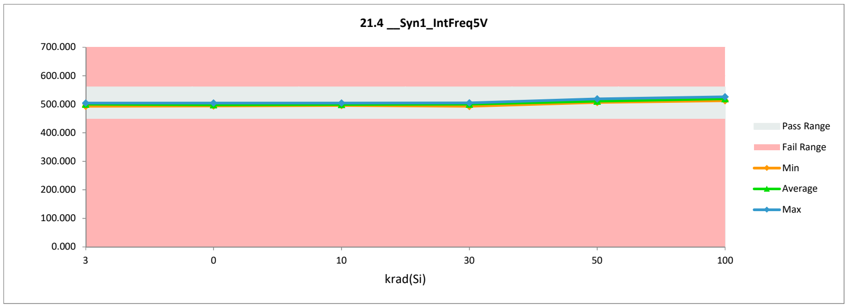
Assy Lot: 2517212

TPS7H4001-SHP

		21.4 __Syn1_IntFreq5V		
	Test Site	Junkins Lab- Dalla	Junkins Lab- Dallas	
	Tester	ETS364/FETS3641	ETS364/FETS36412	
	Test Number	EB588003	EB588003	
	Unit			
	Max Limit	560	560	
	Min Limit	449	449	
krad(Si)	Serial #	Pre Biased	Post Biased	Delta
100	1	497.974	517.239	19.265
100	2	504.470	522.927	18.457
100	3	495.954	514.623	18.669
100	4	496.872	517.317	20.445
100	5	493.619	512.492	18.873
100	6	502.872	520.016	17.144
100	9	497.530	515.955	18.425
100	10	506.108	524.697	18.589
100	11	504.048	523.907	19.859
100	12	500.154	517.507	17.353
100	13	508.092	524.995	16.903
100	14	498.126	514.928	16.802
100	15	504.657	523.795	19.138
100	16	502.007	518.654	16.647
100	17	504.666	521.699	17.033
100	18	498.297	516.677	18.380
100	19	501.922	519.493	17.571
100	20	503.855	521.687	17.832
100	21	507.635	526.039	18.404
100	22	498.992	515.711	16.719
100	23	497.053	514.225	17.172
100	24	500.322	518.632	18.310
50	36	497.928	508.314	10.386
50	37	495.433	506.300	10.867
50	38	503.360	514.304	10.944
50	39	508.171	518.946	10.775
50	40	496.783	507.228	10.445
30	46	490.028	496.805	6.777
30	47	498.470	504.815	6.345
30	48	498.270	504.152	5.882
30	49	484.402	492.614	8.212
30	50	497.273	502.964	5.691
10	56	495.887	498.184	2.297
10	57	501.812	504.076	2.264
10	58	499.073	501.176	2.103
10	59	494.516	497.556	3.040
10	60	493.246	495.671	2.425
3	66	500.889	501.666	0.777
3	67	499.826	500.234	0.408
3	68	503.660	504.320	0.660
3	69	501.428	501.898	0.470
3	70	492.130	492.893	0.763
0	33	493.897	493.890	-0.007
0	34	504.469	504.453	-0.016
0	35	495.500	495.457	-0.043
	Max	508.171	526.039	20.445
	Average	499.371	510.470	11.099
	Min	484.402	492.614	-0.043
	Std Dev	4.928	10.199	7.543



	21.4 __Syn1_IntFreq5V				
Test Site	unkins Lab- Dallas				
Tester	TS364/FETS36412				
Test Number	EB588003				
Max Limit	560				
Min Limit	449				
krad(Si)	3	0	10	30	50	100
LL	449.000	449.000	449.000	449.000	449.000	449.000
Min	492.893	493.890	495.671	492.614	506.300	512.492
Average	500.202	497.933	499.333	500.270	511.018	519.237
Max	504.320	504.453	504.076	504.815	518.946	526.039
UL	560.000	560.000	560.000	560.000	560.000	560.000



TID/HDR Biased Report

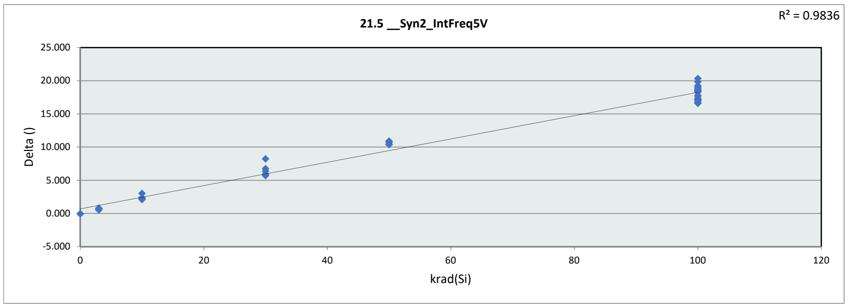
Die lot: 1087518

Exposure date: 11/15/2022

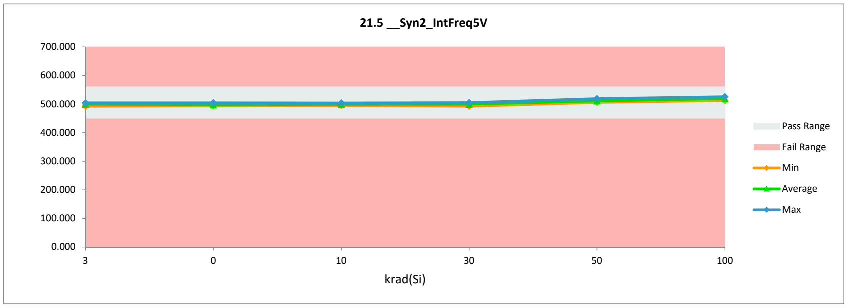
Assy Lot: 2517212

TPS7H4001-SHP

		21.5 __Syn2_IntFreq5V		
	Test Site	Junkins Lab- Dalla	Junkins Lab- Dallas	
	Tester	ETS364/FETS3641	ETS364/FETS36412	
	Test Number	EB588003	EB588003	
	Unit			
	Max Limit	560	560	
	Min Limit	449	449	
krad(Si)	Serial #	Pre Biased	Post Biased	Delta
100	1	497.836	517.091	19.255
100	2	504.318	522.802	18.484
100	3	495.842	514.474	18.632
100	4	496.820	517.151	20.331
100	5	493.540	512.374	18.834
100	6	502.758	519.869	17.111
100	9	497.382	515.869	18.487
100	10	505.969	524.529	18.560
100	11	503.916	523.757	19.841
100	12	499.989	517.327	17.338
100	13	507.953	524.935	16.982
100	14	498.072	514.796	16.724
100	15	504.511	523.597	19.086
100	16	501.899	518.502	16.603
100	17	504.518	521.584	17.066
100	18	498.167	516.528	18.361
100	19	501.772	519.430	17.658
100	20	503.701	521.492	17.791
100	21	507.521	525.855	18.334
100	22	498.847	515.500	16.653
100	23	496.926	514.102	17.176
100	24	500.198	518.519	18.321
50	36	497.832	508.196	10.364
50	37	495.312	506.180	10.868
50	38	503.217	514.106	10.889
50	39	508.056	518.797	10.741
50	40	496.658	507.103	10.445
30	46	489.917	496.680	6.763
30	47	498.312	504.685	6.373
30	48	498.129	504.040	5.911
30	49	484.271	492.496	8.225
30	50	497.111	502.815	5.704
10	56	495.873	498.037	2.164
10	57	501.745	503.963	2.218
10	58	498.946	501.054	2.108
10	59	494.408	497.422	3.014
10	60	493.124	495.489	2.365
3	66	500.832	501.532	0.700
3	67	499.722	500.269	0.547
3	68	503.501	504.229	0.728
3	69	501.251	501.773	0.522
3	70	491.999	492.799	0.800
0	33	493.807	493.751	-0.056
0	34	504.373	504.314	-0.059
0	35	495.410	495.362	-0.048
	Max	508.056	525.855	20.331
	Average	499.250	510.337	11.087
	Min	484.271	492.496	-0.059
	Std Dev	4.920	10.187	7.537



	21.5 __Syn2_IntFreq5V					
Test Site	unkins Lab- Dallas					
Tester	TS364/FETS36412					
Test Number	EB588003					
Max Limit	560					
Min Limit	449					
krad(Si)	3	0	10	30	50	100
LL	449.000	449.000	449.000	449.000	449.000	449.000
Min	492.799	493.751	495.489	492.496	506.180	512.374
Average	500.120	497.809	499.193	500.143	510.876	519.095
Max	504.229	504.314	503.963	504.685	518.797	525.855
UL	560.000	560.000	560.000	560.000	560.000	560.000



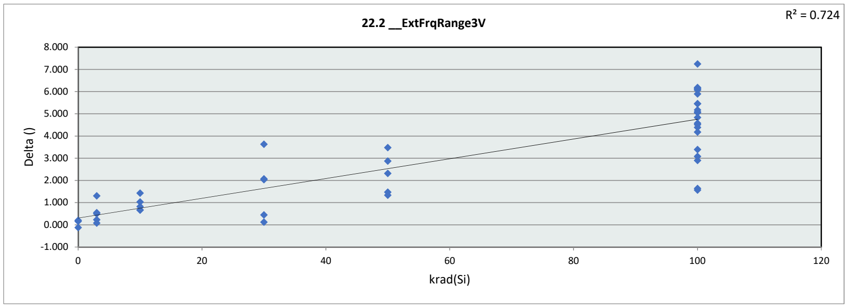
TID/HDR Biased Report

Die lot: 1087518 Exposure date: 11/15/2022

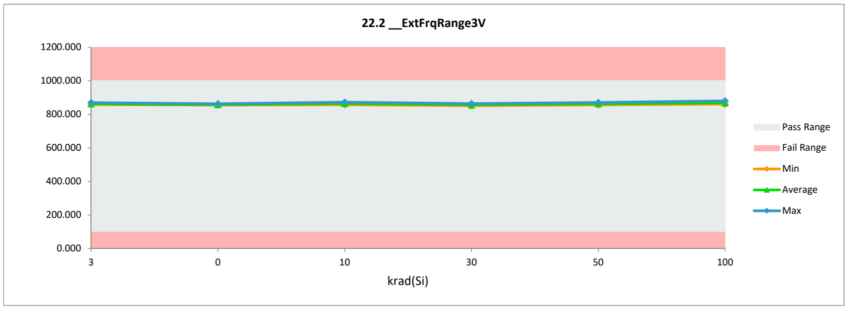
Assy Lot: 2517212

TPS7H4001-SHP

		22.2 __ExtFrqRange3V		
	Test Site	Junkins Lab- Dalla	Junkins Lab- Dallas	
	Tester	ETS364/FETS3641	ETS364/FETS36412	
	Test Number	EB588003	EB588003	
	Unit			
	Max Limit	1000	1000	
	Min Limit	100	100	
krad(Si)	Serial #	Pre Biased	Post Biased	Delta
100	1	862.915	868.001	5.086
100	2	870.650	873.553	2.903
100	3	863.217	868.265	5.048
100	4	863.998	868.515	4.517
100	5	854.641	860.720	6.079
100	6	869.546	875.730	6.184
100	9	857.085	863.242	6.157
100	10	874.827	880.283	5.456
100	11	868.267	873.718	5.451
100	12	868.564	873.738	5.174
100	13	866.992	868.560	1.568
100	14	859.574	865.471	5.897
100	15	860.452	864.632	4.180
100	16	861.997	863.636	1.639
100	17	863.810	868.196	4.386
100	18	863.516	868.348	4.832
100	19	861.033	867.169	6.136
100	20	863.678	870.922	7.244
100	21	862.463	868.533	6.070
100	22	868.658	871.740	3.082
100	23	857.589	860.982	3.393
100	24	862.028	866.600	4.572
50	36	860.349	861.683	1.334
50	37	861.242	863.558	2.316
50	38	860.121	862.990	2.869
50	39	867.707	871.181	3.474
50	40	855.382	856.853	1.471
30	46	850.802	851.249	0.447
30	47	860.081	862.152	2.071
30	48	863.731	863.854	0.123
30	49	848.026	851.657	3.631
30	50	852.763	854.798	2.035
10	56	856.326	856.989	0.663
10	57	859.703	861.128	1.425
10	58	871.512	872.546	1.034
10	59	866.116	866.940	0.824
10	60	865.015	865.685	0.670
3	66	863.063	863.140	0.077
3	67	868.164	869.466	1.302
3	68	861.189	861.735	0.546
3	69	863.156	863.385	0.229
3	70	857.410	857.906	0.496
0	33	855.095	855.298	0.203
0	34	863.356	863.230	-0.126
0	35	855.562	855.721	0.159
	Max	874.827	880.283	7.244
	Average	862.030	864.971	2.941
	Min	848.026	851.249	-0.126
	Std Dev	5.586	6.384	2.225



	22.2 __ExtFrqRange3V					
Test Site	unkins Lab- Dallas					
Tester	TS364/FETS36412					
Test Number	EB588003					
Max Limit	1000					
Min Limit	100					
krad(Si)	3	0	10	30	50	100
LL	100.000	100.000	100.000	100.000	100.000	100.000
Min	857.906	855.298	856.989	851.249	856.853	860.720
Average	863.126	858.083	864.658	856.742	863.253	868.662
Max	869.466	863.230	872.546	863.854	871.181	880.283
UL	1000.000	1000.000	1000.000	1000.000	1000.000	1000.000



TID/HDR Biased Report

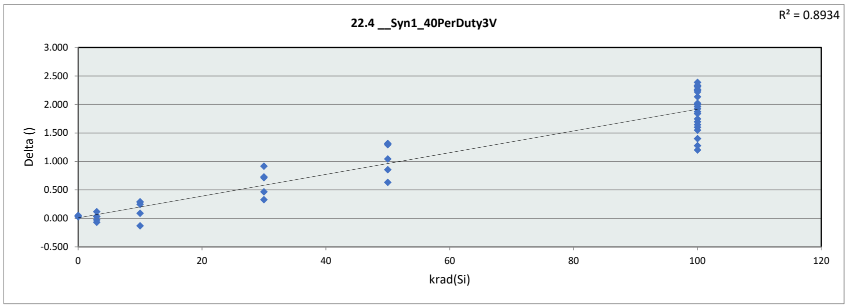
Die lot: 1087518

Exposure date: 11/15/2022

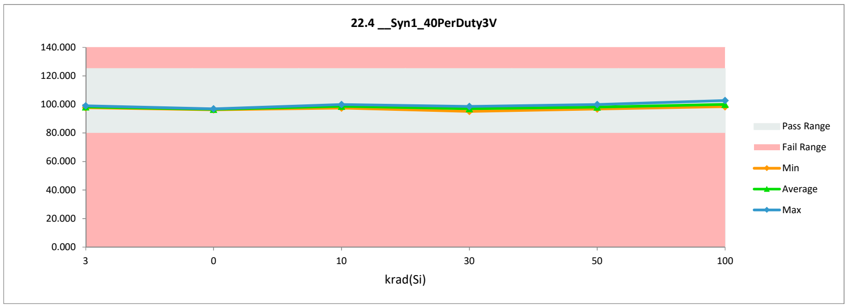
Assy Lot: 2517212

TPS7H4001-SHP

		22.4 __Syn1_40PerDuty3V		
	Test Site	Junkins Lab- Dallas	Junkins Lab- Dallas	
	Tester	ETS364/FETS36412	ETS364/FETS36412	
	Test Number	EB588003	EB588003	
	Unit			
	Max Limit	125	125	
	Min Limit	80	80	
krad(Si)	Serial #	Pre Biased	Post Biased	Delta
100	1	98.258	100.279	2.021
100	2	98.317	99.517	1.200
100	3	98.268	100.513	2.245
100	4	97.862	99.411	1.549
100	5	96.934	99.258	2.324
100	6	100.463	102.726	2.263
100	9	97.065	99.200	2.135
100	10	99.013	100.975	1.962
100	11	98.547	100.292	1.745
100	12	99.525	101.398	1.873
100	13	97.145	98.422	1.277
100	14	98.214	100.211	1.997
100	15	96.910	99.244	2.334
100	16	97.156	99.376	2.220
100	17	98.048	99.649	1.601
100	18	98.351	99.751	1.400
100	19	99.816	101.740	1.924
100	20	98.646	100.485	1.839
100	21	98.147	99.842	1.695
100	22	98.442	100.086	1.644
100	23	96.892	99.280	2.388
100	24	97.760	100.073	2.313
50	36	96.767	97.398	0.631
50	37	97.228	98.270	1.042
50	38	96.851	98.167	1.316
50	39	98.625	99.919	1.294
50	40	95.913	96.767	0.854
30	46	96.805	97.134	0.329
30	47	97.851	98.565	0.714
30	48	97.165	97.632	0.467
30	49	94.218	95.134	0.916
30	50	95.832	96.561	0.729
10	56	97.369	97.457	0.088
10	57	98.609	98.901	0.292
10	58	99.108	98.977	-0.131
10	59	98.092	98.340	0.248
10	60	99.680	99.965	0.285
3	66	98.203	98.134	-0.069
3	67	99.079	99.054	-0.025
3	68	97.624	97.742	0.118
3	69	97.812	97.846	0.034
3	70	98.384	98.416	0.032
0	33	96.834	96.887	0.053
0	34	96.197	96.224	0.027
0	35	96.569	96.612	0.043
	Max	100.463	102.726	2.388
	Average	97.791	98.930	1.139
	Min	94.218	95.134	-0.131
	Std Dev	1.172	1.559	0.859



	22.4 __Syn1_40PerDuty3V					
Test Site	unkins Lab- Dallas					
Tester	TS364/FETS36412					
Test Number	EB588003					
Max Limit	125					
Min Limit	80					
krad(Si)	3	0	10	30	50	100
LL	80.000	80.000	80.000	80.000	80.000	80.000
Min	97.742	96.224	97.457	95.134	96.767	98.422
Average	98.238	96.574	98.728	97.005	98.104	100.079
Max	99.054	96.887	99.965	98.565	99.919	102.726
UL	125.000	125.000	125.000	125.000	125.000	125.000



TID/HDR Biased Report

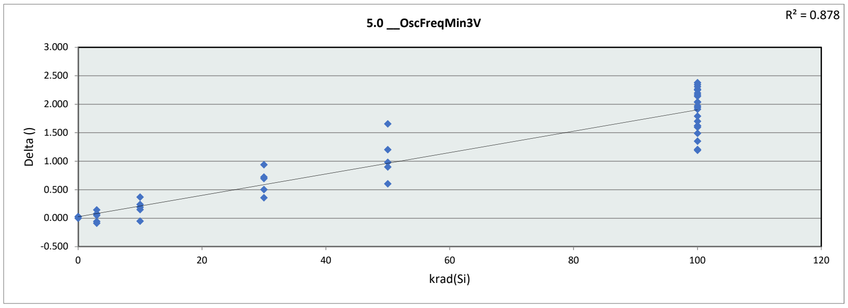
Die lot: 1087518

Exposure date: 11/15/2022

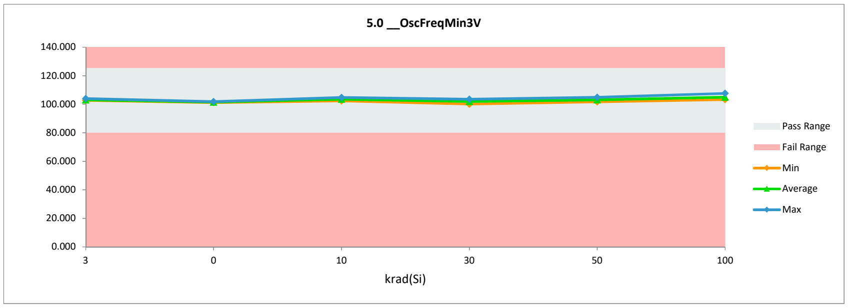
Assy Lot: 2517212

TPS7H4001-SHP

		5.0 __OscFreqMin3V		
	Test Site	Junkins Lab- Dalla	Junkins Lab- Dallas	
	Tester	ETS364/FETS3641	ETS364/FETS36412	
	Test Number	EB588003	EB588003	
	Unit			
	Max Limit	125	125	
	Min Limit	80	80	
krad(Si)	Serial #	Pre Biased	Post Biased	Delta
100	1	103.175	105.214	2.039
100	2	103.255	104.460	1.205
100	3	103.123	105.468	2.345
100	4	102.822	104.312	1.490
100	5	101.945	104.142	2.197
100	6	105.246	107.626	2.380
100	9	102.065	104.105	2.040
100	10	103.902	105.872	1.970
100	11	103.461	105.163	1.702
100	12	104.414	106.326	1.912
100	13	102.098	103.289	1.191
100	14	103.007	104.630	1.623
100	15	101.867	104.118	2.251
100	16	102.151	104.292	2.141
100	17	102.990	104.588	1.598
100	18	103.287	104.640	1.353
100	19	104.398	106.562	2.164
100	20	103.418	105.364	1.946
100	21	103.002	104.794	1.792
100	22	103.365	104.987	1.622
100	23	101.897	104.206	2.309
100	24	102.694	104.959	2.265
50	36	101.716	102.321	0.605
50	37	102.213	103.193	0.980
50	38	101.801	103.005	1.204
50	39	103.214	104.869	1.655
50	40	100.861	101.759	0.898
30	46	101.797	102.156	0.359
30	47	102.791	103.487	0.696
30	48	102.121	102.623	0.502
30	49	99.161	100.100	0.939
30	50	100.841	101.563	0.722
10	56	102.295	102.445	0.150
10	57	103.546	103.788	0.242
10	58	103.642	103.589	-0.053
10	59	103.020	103.212	0.192
10	60	104.414	104.784	0.370
3	66	103.103	103.016	-0.087
3	67	104.006	103.950	-0.056
3	68	102.619	102.697	0.078
3	69	102.787	102.836	0.049
3	70	102.858	103.003	0.145
0	33	101.829	101.857	0.028
0	34	101.141	101.140	-0.001
0	35	101.570	101.598	0.028
	Max	105.246	107.626	2.380
	Average	102.687	103.825	1.137
	Min	99.161	100.100	-0.087
	Std Dev	1.103	1.531	0.852



	5.0 __OscFreqMin3V				
Test Site	unkins Lab- Dallas				
Tester	TS364/FETS36412				
Test Number	EB588003				
Max Limit	125				
Min Limit	80				
krad(Si)	3	0	10	30	50	100
LL	80.000	80.000	80.000	80.000	80.000	80.000
Min	102.697	101.140	102.445	100.100	101.759	103.289
Average	103.100	101.532	103.564	101.986	103.029	104.960
Max	103.950	101.857	104.784	103.487	104.869	107.626
UL	125.000	125.000	125.000	125.000	125.000	125.000



TID/HDR Biased Report

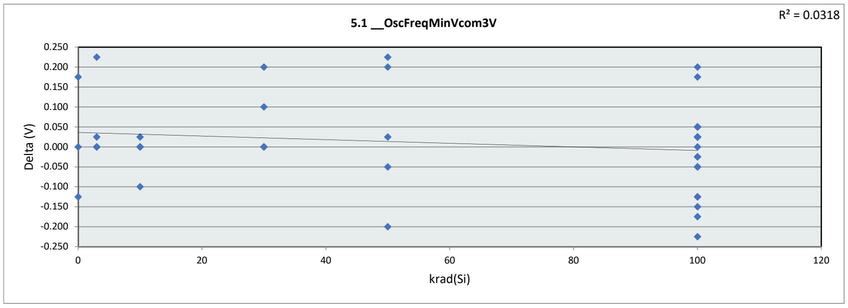
Die lot: 1087518 Exposure date: 11/15/2022

Assy Lot: 2517212

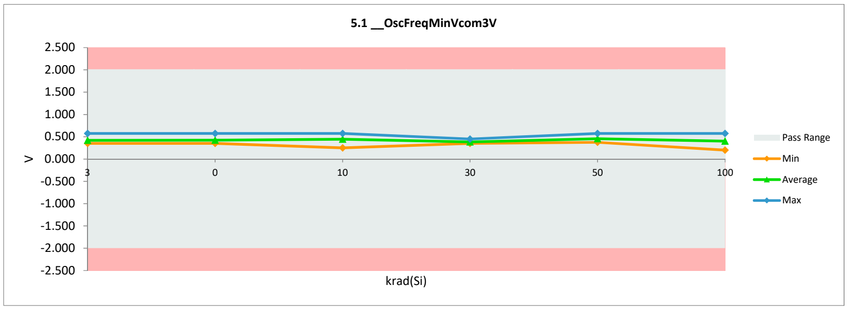
TPS7H4001-SHP

	5.1 __OscFreqMinVcom3V	
Test Site	Junkins Lab- Dalla	Junkins Lab- Dallas
Tester	ETS364/FETS3641	ETS364/FETS36412
Test Number	EB588003	EB588003
Unit	V	V
Max Limit	2	2
Min Limit	-2	-2

krad(Si)	Serial #	Pre Biased	Post Biased	Delta
100	1	0.375	0.400	0.025
100	2	0.375	0.575	0.200
100	3	0.350	0.375	0.025
100	4	0.400	0.425	0.025
100	5	0.350	0.375	0.025
100	6	0.575	0.350	-0.225
100	9	0.250	0.425	0.175
100	10	0.300	0.250	-0.050
100	11	0.425	0.400	-0.025
100	12	0.400	0.450	0.050
100	13	0.400	0.450	0.050
100	14	0.550	0.575	0.025
100	15	0.350	0.200	-0.150
100	16	0.375	0.250	-0.125
100	17	0.500	0.450	-0.050
100	18	0.375	0.350	-0.025
100	19	0.575	0.400	-0.175
100	20	0.575	0.450	-0.125
100	21	0.575	0.525	-0.050
100	22	0.375	0.425	0.050
100	23	0.375	0.425	0.050
100	24	0.350	0.350	0.000
50	36	0.350	0.375	0.025
50	37	0.425	0.375	-0.050
50	38	0.350	0.575	0.225
50	39	0.575	0.375	-0.200
50	40	0.375	0.575	0.200
30	46	0.375	0.375	0.000
30	47	0.375	0.375	0.000
30	48	0.375	0.375	0.000
30	49	0.250	0.350	0.100
30	50	0.250	0.450	0.200
10	56	0.350	0.250	-0.100
10	57	0.400	0.425	0.025
10	58	0.575	0.575	0.000
10	59	0.400	0.400	0.000
10	60	0.575	0.575	0.000
3	66	0.175	0.400	0.225
3	67	0.400	0.400	0.000
3	68	0.375	0.375	0.000
3	69	0.325	0.350	0.025
3	70	0.575	0.575	0.000
0	33	0.475	0.350	-0.125
0	34	0.400	0.575	0.175
0	35	0.350	0.350	0.000
	Max	0.575	0.575	0.225
	Average	0.406	0.415	0.009
	Min	0.175	0.200	-0.225
	Std Dev	0.100	0.095	0.108



	5.1 __OscFreqMinVcom3V					
Test Site	unkins Lab- Dallas					
Tester	TS364/FETS36412					
Test Number	EB588003					
Max Limit	2	V				
Min Limit	-2	V				
krad(Si)	3	0	10	30	50	100
LL	-2.000	-2.000	-2.000	-2.000	-2.000	-2.000
Min	0.350	0.350	0.250	0.350	0.375	0.200
Average	0.420	0.425	0.445	0.385	0.455	0.403
Max	0.575	0.575	0.575	0.450	0.575	0.575
UL	2.000	2.000	2.000	2.000	2.000	2.000



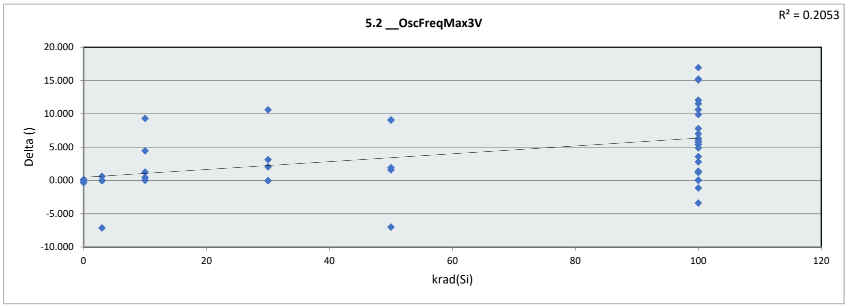
TID/HDR Biased Report

Die lot: 1087518 Exposure date: 11/15/2022

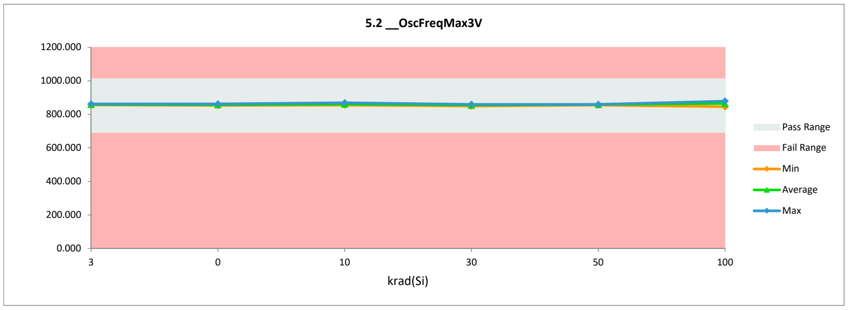
Assy Lot: 2517212

TPS7H4001-SHP

		5.2 __OscFreqMax3V		
	Test Site	Junkins Lab- Dalla	Junkins Lab- Dallas	
	Tester	ETS364/FETS36412	ETS364/FETS36412	
	Test Number	EB588003	EB588003	
	Unit			
	Max Limit	1011	1011	
	Min Limit	689	689	
krad(Si)	Serial #	Pre Biased	Post Biased	Delta
100	1	859.598	859.647	0.049
100	2	869.898	872.676	2.778
100	3	859.607	859.629	0.022
100	4	841.671	845.257	3.586
100	5	853.893	850.499	-3.394
100	6	859.596	874.825	15.229
100	9	855.739	862.032	6.293
100	10	862.038	878.954	16.916
100	11	859.643	871.685	12.042
100	12	867.214	872.595	5.381
100	13	859.589	867.370	7.781
100	14	858.242	859.635	1.393
100	15	858.478	859.662	1.184
100	16	850.458	861.980	11.522
100	17	861.859	866.734	4.875
100	18	859.639	866.632	6.993
100	19	850.504	865.575	15.071
100	20	859.601	869.492	9.891
100	21	861.544	867.519	5.975
100	22	859.610	870.238	10.628
100	23	854.374	860.069	5.695
100	24	860.694	859.565	-1.129
50	36	850.492	859.579	9.087
50	37	850.571	859.620	9.049
50	38	858.031	859.620	1.589
50	39	866.659	859.643	-7.016
50	40	853.857	855.773	1.916
30	46	850.090	850.029	-0.061
30	47	848.996	859.598	10.602
30	48	859.626	859.598	-0.028
30	49	847.817	850.941	3.124
30	50	851.990	854.021	2.031
10	56	855.250	855.701	0.451
10	57	858.648	859.891	1.243
10	58	859.611	868.920	9.309
10	59	859.606	859.612	0.006
10	60	859.579	864.033	4.454
3	66	861.917	861.858	-0.059
3	67	867.055	859.928	-7.127
3	68	859.579	859.602	0.023
3	69	859.579	859.588	0.009
3	70	856.062	856.683	0.621
0	33	853.916	853.832	-0.084
0	34	862.264	862.402	0.138
0	35	855.352	855.005	-0.347
	Max	869.898	878.954	16.916
	Average	857.556	861.505	3.949
	Min	841.671	845.257	-7.127
	Std Dev	5.555	6.924	5.527



	5.2 __OscFreqMax3V				
Test Site	unkins Lab- Dallas				
Tester	TS364/FETS36412				
Test Number	EB588003				
Max Limit	1011				
Min Limit	689				
krad(Si)	3	0	10	30	50	100
LL	689.000	689.000	689.000	689.000	689.000	689.000
Min	856.683	853.832	855.701	850.029	855.773	845.257
Average	859.532	857.080	861.631	854.837	858.847	864.649
Max	861.858	862.402	868.920	859.598	859.643	878.954
UL	1011.000	1011.000	1011.000	1011.000	1011.000	1011.000



TID/HDR Biased Report

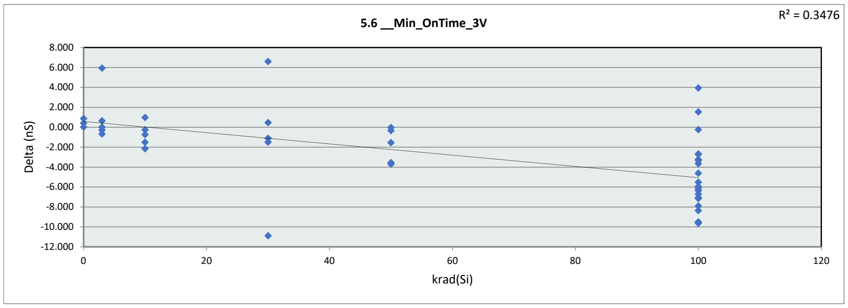
Die lot: 1087518

Exposure date: 11/15/2022

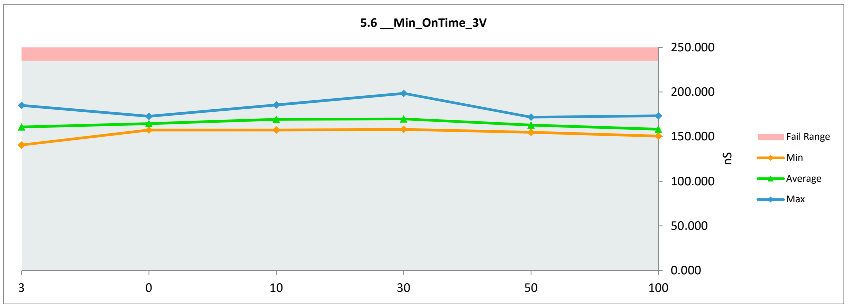
Assy Lot: 2517212

TPS7H4001-SHP

		5.6 __Min_OnTime_3V		
	Test Site	Junkins Lab- Dalla	Junkins Lab- Dallas	
	Tester	ETS364/FETS3641	ETS364/FETS36412	
	Test Number	EB588003	EB588003	
	Unit	nS	nS	
	Max Limit	235	235	
	Min Limit			
krad(Si)	Serial #	Pre Biased	Post Biased	Delta
100	1	161.016	164.956	3.940
100	2	163.388	156.250	-7.138
100	3	165.500	167.045	1.545
100	4	166.802	160.450	-6.352
100	5	173.515	173.267	-0.248
100	6	174.487	166.595	-7.892
100	9	163.370	153.742	-9.628
100	10	155.843	151.222	-4.621
100	11	168.516	161.399	-7.117
100	12	162.858	153.351	-9.507
100	13	156.395	153.065	-3.330
100	14	169.344	163.191	-6.153
100	15	163.515	160.840	-2.675
100	16	157.305	150.596	-6.709
100	17	156.282	153.044	-3.238
100	18	158.685	155.037	-3.648
100	19	160.276	154.323	-5.953
100	20	159.931	154.421	-5.510
100	21	172.461	162.943	-9.518
100	22	159.951	151.595	-8.356
100	23	158.838	151.788	-7.050
100	24	166.673	163.951	-2.722
50	36	163.537	163.500	-0.037
50	37	163.290	162.960	-0.330
50	38	165.477	161.773	-3.704
50	39	175.367	171.819	-3.548
50	40	156.386	154.844	-1.542
30	46	159.309	159.781	0.472
30	47	159.226	158.119	-1.107
30	48	170.462	168.969	-1.493
30	49	209.347	198.465	-10.882
30	50	157.102	163.701	6.599
10	56	167.374	166.632	-0.742
10	57	160.976	160.724	-0.252
10	58	187.715	185.559	-2.156
10	59	158.922	157.403	-1.519
10	60	176.003	176.985	0.982
3	66	153.720	153.444	-0.276
3	67	141.252	140.583	-0.669
3	68	158.075	158.725	0.650
3	69	179.080	185.011	5.931
3	70	165.727	165.742	0.015
0	33	162.956	163.377	0.421
0	34	156.600	157.470	0.870
0	35	172.785	172.804	0.019
	Max	209.347	198.465	6.599
	Average	164.792	162.032	-2.760
	Min	141.252	140.583	-10.882
	Std Dev	10.452	10.394	4.079



	5.6 __Min_OnTime_3V					
Test Site	unkins Lab- Dallas					
Tester	TS364/FETS36412					
Test Number	EB588003					
Max Limit	235	nS				
Min Limit		nS				
krad(Si)	3	0	10	30	50	100
LL						
Min	140.583	157.470	157.403	158.119	154.844	150.596
Average	160.701	164.550	169.461	169.807	162.979	158.321
Max	185.011	172.804	185.559	198.465	171.819	173.267
UL	235.000	235.000	235.000	235.000	235.000	235.000



TID/HDR Biased Report

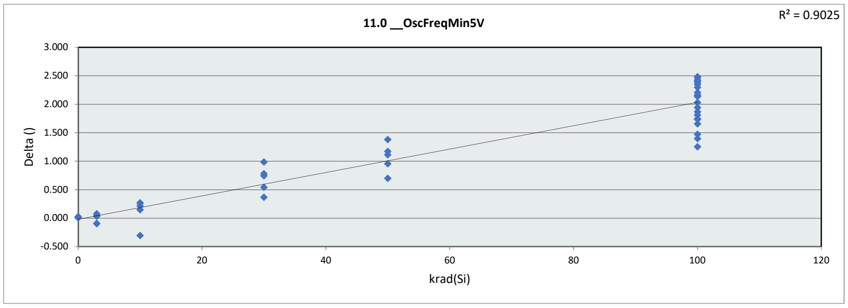
Die lot: 1087518 Exposure date: 11/15/2022

Assy Lot: 2517212

TPS7H4001-SHP

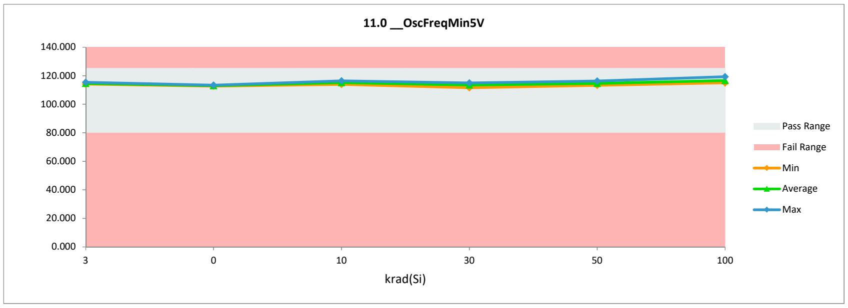
	11.0 __OscFreqMin5V	
Test Site	Junkins Lab- Dalla	Junkins Lab- Dallas
Tester	ETS364/FETS3641	ETS364/FETS36412
Test Number	EB588003	EB588003
Unit		
Max Limit	125	125
Min Limit	80	80

krad(Si)	Serial #	Pre Biased	Post Biased	Delta
100	1	114.703	116.847	2.144
100	2	114.879	116.134	1.255
100	3	114.675	117.098	2.423
100	4	114.321	115.978	1.657
100	5	113.357	115.707	2.350
100	6	116.923	119.313	2.390
100	9	113.471	115.679	2.208
100	10	115.359	117.502	2.143
100	11	114.998	116.866	1.868
100	12	115.895	117.925	2.030
100	13	113.596	114.992	1.396
100	14	114.742	116.878	2.136
100	15	113.254	115.669	2.415
100	16	113.543	115.841	2.298
100	17	114.507	116.250	1.743
100	18	114.794	116.267	1.473
100	19	116.193	118.355	2.162
100	20	115.078	117.020	1.942
100	21	114.647	116.457	1.810
100	22	114.831	116.566	1.735
100	23	113.323	115.790	2.467
100	24	114.171	116.653	2.482
50	36	113.186	113.885	0.699
50	37	113.645	114.757	1.112
50	38	113.278	114.658	1.380
50	39	115.087	116.258	1.171
50	40	112.317	113.273	0.956
30	46	113.252	113.619	0.367
30	47	114.246	114.990	0.744
30	48	113.669	114.212	0.543
30	49	110.561	111.548	0.987
30	50	112.216	112.997	0.781
10	56	113.829	113.978	0.149
10	57	115.053	115.320	0.267
10	58	115.546	115.242	-0.304
10	59	114.583	114.798	0.215
10	60	116.137	116.405	0.268
3	66	114.730	114.634	-0.096
3	67	115.522	115.431	-0.091
3	68	114.075	114.152	0.077
3	69	114.247	114.288	0.041
3	70	114.770	114.804	0.034
0	33	113.330	113.351	0.021
0	34	112.655	112.682	0.027
0	35	112.975	112.982	0.007
	Max	116.923	119.313	2.482
	Average	114.226	115.423	1.197
	Min	110.561	111.548	-0.304
	Std Dev	1.182	1.598	0.920



	11.0 __OscFreqMin5V
Test Site	unkins Lab- Dallas
Tester	TS364/FETS36412
Test Number	EB588003
Max Limit	125
Min Limit	80

krad(Si)	3	0	10	30	50	100
LL	80.000	80.000	80.000	80.000	80.000	80.000
Min	114.152	112.682	113.978	111.548	113.273	114.992
Average	114.662	113.005	115.149	113.473	114.566	116.627
Max	115.431	113.351	116.405	114.990	116.258	119.313
UL	125.000	125.000	125.000	125.000	125.000	125.000



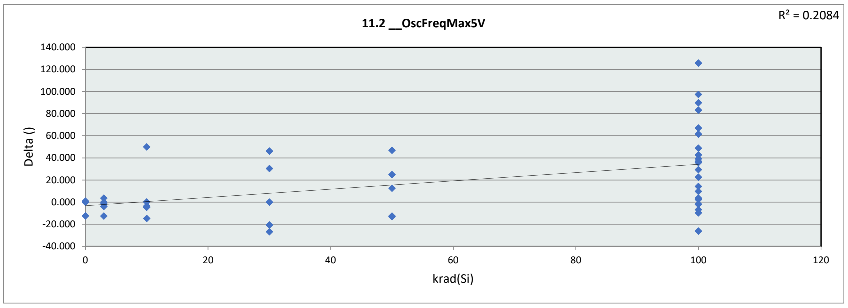
TID/HDR Biased Report

Die lot: 1087518 Exposure date: 11/15/2022

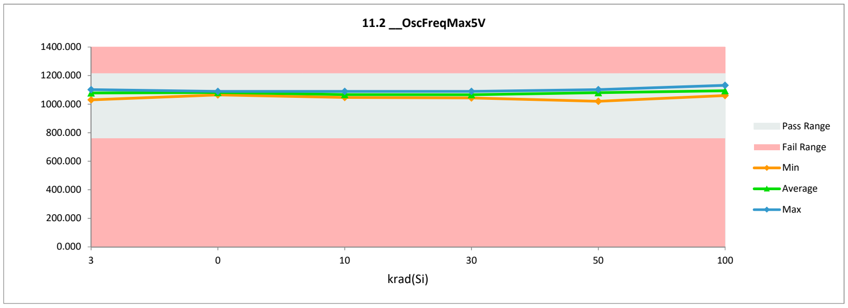
Assy Lot: 2517212

TPS7H4001-SHP

		11.2 __OscFreqMax5V		
	Test Site	Junkins Lab- Dalla	Junkins Lab- Dallas	
	Tester	ETS364/FETS36412	ETS364/FETS36412	
	Test Number	EB588003	EB588003	
	Unit			
	Max Limit	1212	1212	
	Min Limit	760	760	
krad(Si)	Serial #	Pre Biased	Post Biased	Delta
100	1	978.334	1104.015	125.681
100	2	1046.650	1085.886	39.236
100	3	1089.209	1082.441	-6.768
100	4	1062.563	1060.719	-1.844
100	5	1053.209	1101.900	48.691
100	6	1076.897	1091.067	14.170
100	9	1076.676	1080.334	3.658
100	10	1046.253	1129.498	83.245
100	11	1047.891	1114.877	66.986
100	12	1101.841	1099.791	-2.050
100	13	1023.172	1113.057	89.885
100	14	1084.898	1075.233	-9.665
100	15	978.285	1075.610	97.325
100	16	1033.517	1069.198	35.681
100	17	1101.798	1131.213	29.415
100	18	1101.860	1075.612	-26.248
100	19	1089.255	1131.950	42.695
100	20	1053.162	1090.103	36.941
100	21	1067.069	1076.833	9.764
100	22	1041.737	1103.267	61.530
100	23	1073.824	1076.199	2.375
100	24	1064.958	1087.599	22.641
50	36	1032.068	1019.517	-12.551
50	37	1089.196	1101.828	12.632
50	38	1089.180	1076.016	-13.164
50	39	1053.178	1100.011	46.833
50	40	1076.866	1101.803	24.937
30	46	1070.555	1043.753	-26.802
30	47	1076.216	1055.584	-20.632
30	48	1034.475	1064.823	30.348
30	49	1030.433	1076.565	46.132
30	50	1089.218	1089.240	0.022
10	56	1089.131	1089.327	0.196
10	57	1061.501	1057.828	-3.673
10	58	1051.298	1046.703	-4.595
10	59	1015.044	1064.928	49.884
10	60	1089.152	1074.380	-14.772
3	66	1101.785	1089.242	-12.543
3	67	1071.117	1069.459	-1.658
3	68	1101.535	1097.608	-3.927
3	69	1101.873	1101.817	-0.056
3	70	1026.919	1030.520	3.601
0	33	1064.142	1064.940	0.798
0	34	1101.817	1089.355	-12.462
0	35	1088.658	1088.459	-0.199
	Max	1101.873	1131.950	125.681
	Average	1064.409	1083.336	18.927
	Min	978.285	1019.517	-26.802
	Std Dev	30.999	24.071	35.005



	11.2 __OscFreqMax5V					
Test Site	unkins Lab- Dallas					
Tester	TS364/FETS36412					
Test Number	EB588003					
Max Limit	1212					
Min Limit	760					
krad(Si)	3	0	10	30	50	100
LL	760.000	760.000	760.000	760.000	760.000	760.000
Min	1030.520	1064.940	1046.703	1043.753	1019.517	1060.719
Average	1077.729	1080.918	1066.633	1065.993	1079.835	1093.473
Max	1101.817	1089.355	1089.327	1089.240	1101.828	1131.950
UL	1212.000	1212.000	1212.000	1212.000	1212.000	1212.000



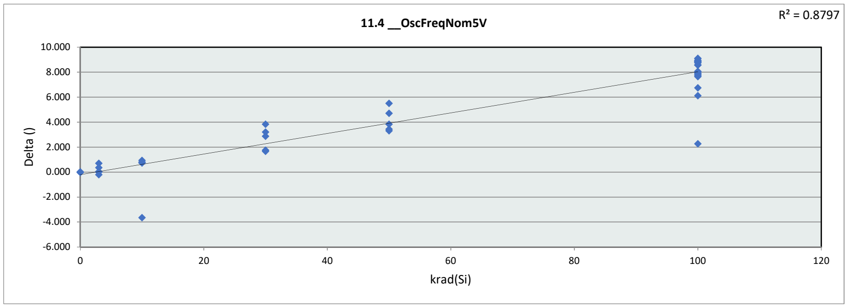
TID/HDR Biased Report

Die lot: 1087518 Exposure date: 11/15/2022

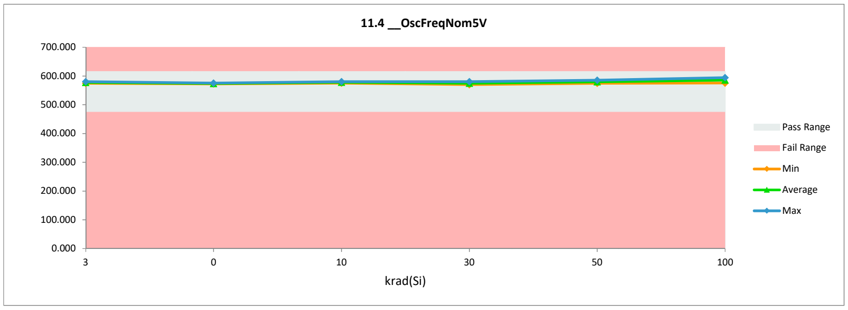
Assy Lot: 2517212

TPS7H4001-SHP

		11.4 __OscFreqNom5V		
	Test Site	Junkins Lab- Dalla	Junkins Lab- Dallas	
	Tester	ETS364/FETS3641	ETS364/FETS36412	
	Test Number	EB588003	EB588003	
	Unit			
	Max Limit	615	615	
	Min Limit	475	475	
krad(Si)	Serial #	Pre Biased	Post Biased	Delta
100	1	577.002	585.017	8.015
100	2	582.579	589.320	6.741
100	3	578.133	587.216	9.083
100	4	578.000	586.740	8.740
100	5	572.105	580.951	8.846
100	6	585.021	594.127	9.106
100	9	573.370	575.633	2.263
100	10	584.021	592.954	8.933
100	11	579.933	588.846	8.913
100	12	581.689	590.258	8.569
100	13	579.618	585.737	6.119
100	14	575.394	584.176	8.782
100	15	574.168	583.051	8.883
100	16	575.433	583.495	8.062
100	17	577.899	585.604	7.705
100	18	578.304	586.221	7.917
100	19	578.642	587.482	8.840
100	20	578.908	587.477	8.569
100	21	577.880	585.660	7.780
100	22	580.206	588.069	7.863
100	23	573.317	581.897	8.580
100	24	577.278	584.923	7.645
50	36	574.482	577.787	3.305
50	37	575.224	579.053	3.829
50	38	576.057	580.767	4.710
50	39	580.055	585.555	5.500
50	40	571.423	574.854	3.431
30	46	571.016	572.685	1.669
30	47	576.961	580.165	3.204
30	48	576.990	578.749	1.759
30	49	566.172	570.000	3.828
30	50	569.985	572.856	2.871
10	56	574.502	575.294	0.792
10	57	577.612	578.402	0.790
10	58	581.071	577.423	-3.648
10	59	579.183	580.120	0.937
10	60	579.594	580.319	0.725
3	66	577.974	577.771	-0.203
3	67	580.323	580.357	0.034
3	68	576.612	576.967	0.355
3	69	577.682	577.691	0.009
3	70	574.122	574.826	0.704
0	33	573.273	573.254	-0.019
0	34	575.664	575.633	-0.031
0	35	572.744	572.766	0.022
	Max	585.021	594.127	9.106
	Average	576.836	581.514	4.678
	Min	566.172	570.000	-3.648
	Std Dev	3.722	5.879	3.737



	11.4 __OscFreqNom5V					
Test Site	unkins Lab- Dallas					
Tester	TS364/FETS36412					
Test Number	EB588003					
Max Limit	615					
Min Limit	475					
krad(Si)	3	0	10	30	50	100
LL	475.000	475.000	475.000	475.000	475.000	475.000
Min	574.826	572.766	575.294	570.000	574.854	575.633
Average	577.522	573.884	578.312	574.891	579.603	586.130
Max	580.357	575.633	580.319	580.165	585.555	594.127
UL	615.000	615.000	615.000	615.000	615.000	615.000



TID/HDR Biased Report

Die lot: 1087518

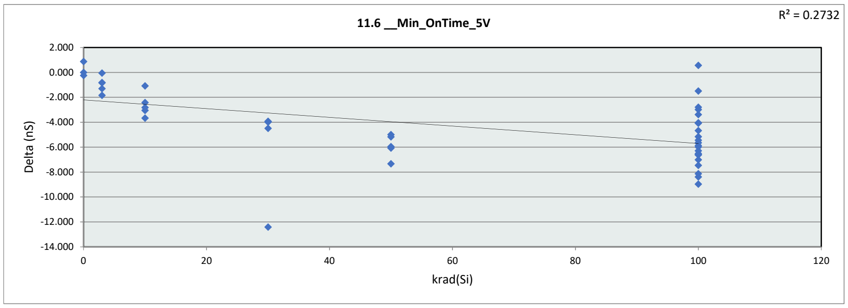
Exposure date: 11/15/2022

Assy Lot: 2517212

TPS7H4001-SHP

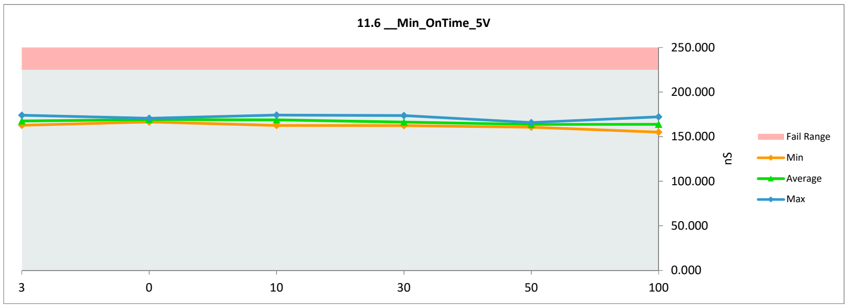
	11.6 __Min_OnTime_5V	
Test Site	Junkins Lab- Dalla	Junkins Lab- Dallas
Tester	ETS364/FETS36412	ETS364/FETS36412
Test Number	EB588003	EB588003
Unit	nS	nS
Max Limit	225	225
Min Limit		

krad(Si)	Serial #	Pre Biased	Post Biased	Delta
100	1	170.713	169.221	-1.492
100	2	170.760	164.244	-6.516
100	3	171.672	172.237	0.565
100	4	169.772	164.120	-5.652
100	5	173.629	169.585	-4.044
100	6	173.536	168.373	-5.163
100	9	168.150	160.020	-8.130
100	10	165.705	158.692	-7.013
100	11	170.713	164.732	-5.981
100	12	164.834	159.392	-5.442
100	13	167.536	158.565	-8.971
100	14	174.425	168.136	-6.289
100	15	172.006	169.019	-2.987
100	16	165.495	159.610	-5.885
100	17	165.632	159.011	-6.621
100	18	168.445	164.363	-4.082
100	19	168.721	164.055	-4.666
100	20	168.473	160.084	-8.389
100	21	169.487	166.695	-2.792
100	22	162.556	155.090	-7.466
100	23	168.088	161.489	-6.599
100	24	172.416	169.029	-3.387
50	36	168.454	163.285	-5.169
50	37	173.212	165.879	-7.333
50	38	170.666	165.675	-4.991
50	39	169.086	163.136	-5.950
50	40	166.768	160.699	-6.069
30	46	166.918	162.426	-4.492
30	47	168.123	164.167	-3.956
30	48	172.092	168.173	-3.919
30	49	186.081	173.674	-12.407
30	50	166.993	163.008	-3.985
10	56	173.735	170.911	-2.824
10	57	166.327	162.662	-3.665
10	58	177.263	174.216	-3.047
10	59	167.766	165.344	-2.422
10	60	171.799	170.723	-1.076
3	66	164.657	162.819	-1.838
3	67	165.048	163.747	-1.301
3	68	166.484	165.651	-0.833
3	69	174.868	174.057	-0.811
3	70	171.762	171.714	-0.048
0	33	170.870	170.629	-0.241
0	34	165.620	166.492	0.872
0	35	170.182	170.179	-0.003
	Max	186.081	174.216	0.872
	Average	169.723	165.445	-4.278
	Min	162.556	155.090	-12.407
	Std Dev	4.062	4.657	2.842



	11.6 __Min_OnTime_5V	
Test Site	unkins Lab- Dallas	
Tester	TS364/FETS36412	
Test Number	EB588003	
Max Limit	225	nS
Min Limit		nS

krad(Si)	3	0	10	30	50	100
LL						
Min	162.819	166.492	162.662	162.426	160.699	155.090
Average	167.598	169.100	168.771	166.290	163.735	163.898
Max	174.057	170.629	174.216	173.674	165.879	172.237
UL	225.000	225.000	225.000	225.000	225.000	225.000



TID Unbiased HDR Report

Die lot: 1087518
Assy Lot: 2517212

Exposure date: 11/15/2022

TPS7H4001-SHP

TID Unbiased HDR Report

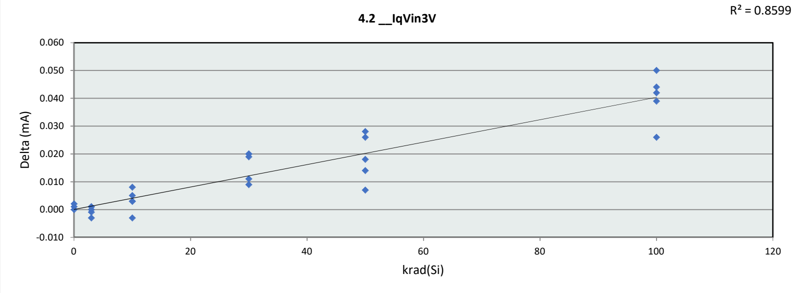
Die lot: 1087518
Assy Lot: 2517212

Exposure date: 11/15/2022

TPS7H4001-SHP

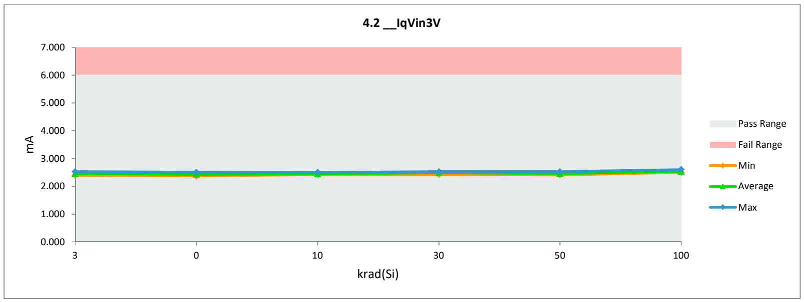
	4.2 __IqVin3V	
Test Site	unkins Lab - Dalla	unkins Lab - Dallas
Tester	TS364 - FETS3641	TS364 - FETS36412
Test Number	EB588003	EB588003
Unit	mA	mA
Max Limit	6	6
Min Limit	0	0

krad(Si)	Serial #	Pre_Unbiased	Post_unbiased	Delta
100	27	2.505	2.544	0.039
100	28	2.487	2.513	0.026
100	29	2.563	2.605	0.042
100	30	2.466	2.510	0.044
100	31	2.451	2.501	0.050
50	41	2.384	2.412	0.028
50	42	2.526	2.533	0.007
50	43	2.447	2.473	0.026
50	44	2.446	2.460	0.014
50	45	2.407	2.425	0.018
30	51	2.507	2.526	0.019
30	52	2.410	2.419	0.009
30	53	2.518	2.529	0.011
30	54	2.498	2.518	0.020
30	55	2.446	2.466	0.020
10	61	2.428	2.433	0.005
10	62	2.497	2.500	0.003
10	63	2.438	2.435	-0.003
10	64	2.418	2.421	0.003
10	65	2.425	2.433	0.008
3	71	2.479	2.480	0.001
3	72	2.470	2.471	0.001
3	73	2.405	2.404	-0.001
3	74	2.417	2.417	0.000
3	75	2.534	2.531	-0.003
0	33	2.370	2.372	0.002
0	34	2.504	2.505	0.001
0	35	2.417	2.417	0.000
	Max	2.563	2.605	0.050
	Average	2.459	2.473	0.014
	Min	2.370	2.372	-0.003
	Std Dev	0.049	0.055	0.016



	4.2 __IqVin3V	
Test Site	unkins Lab - Dallas	
Tester	S364 - FETS36412	
Test Number	EB588003	
Max Limit	6	mA
Min Limit	0	mA

krad(Si)	3	0	10	30	50	100
LL	0.000	0.000	0.000	0.000	0.000	0.000
Min	2.404	2.372	2.421	2.419	2.412	2.501
Average	2.461	2.431	2.444	2.492	2.461	2.535
Max	2.531	2.505	2.500	2.529	2.533	2.605
UL	6.000	6.000	6.000	6.000	6.000	6.000



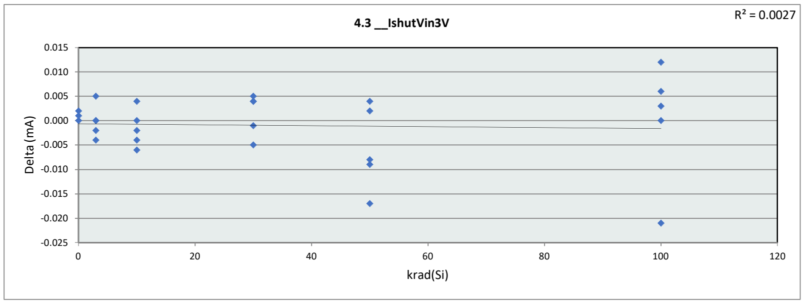
TID Unbiased HDR Report

Die lot: 1087518
Assy Lot: 2517212

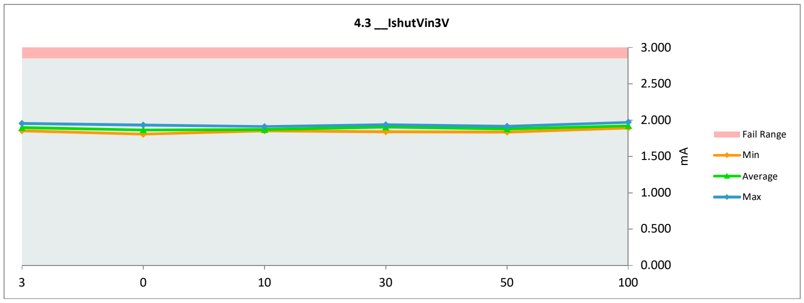
Exposure date: 11/15/2022

TPS7H4001-SHP

		4.3 __IshutVin3V		
	Test Site	unkins Lab - Dalla	unkins Lab - Dallas	
	Tester	TS364 - FETS3641	TS364 - FETS36412	
	Test Number	EB588003	EB588003	
	Unit	mA	mA	
	Max Limit	2.85	2.85	
	Min Limit			
krad(Si)	Serial #	Pre_Unbiased	Post_unbiased	Delta
100	27	1.937	1.937	0.000
100	28	1.914	1.893	-0.021
100	29	1.967	1.970	0.003
100	30	1.901	1.913	0.012
100	31	1.887	1.893	0.006
50	41	1.833	1.837	0.004
50	42	1.932	1.915	-0.017
50	43	1.885	1.887	0.002
50	44	1.896	1.887	-0.009
50	45	1.868	1.860	-0.008
30	51	1.932	1.936	0.004
30	52	1.845	1.840	-0.005
30	53	1.936	1.935	-0.001
30	54	1.932	1.936	0.004
30	55	1.882	1.887	0.005
10	61	1.854	1.854	0.000
10	62	1.916	1.912	-0.004
10	63	1.876	1.870	-0.006
10	64	1.870	1.868	-0.002
10	65	1.852	1.856	0.004
3	71	1.899	1.899	0.000
3	72	1.901	1.901	0.000
3	73	1.854	1.852	-0.002
3	74	1.869	1.874	0.005
3	75	1.956	1.952	-0.004
0	33	1.806	1.806	0.000
0	34	1.929	1.931	0.002
0	35	1.857	1.858	0.001
	Max	1.967	1.970	0.012
	Average	1.892	1.891	-0.001
	Min	1.806	1.806	-0.021
	Std Dev	0.039	0.039	0.007



	4.3 __IshutVin3V					
Test Site	unkins Lab - Dallas					
Tester	TS364 - FETS36412					
Test Number	EB588003					
Max Limit	2.85	mA				
Min Limit		mA				
krad(Si)	3	0	10	30	50	100
LL						
Min	1.852	1.806	1.854	1.840	1.837	1.893
Average	1.896	1.865	1.872	1.907	1.877	1.921
Max	1.952	1.931	1.912	1.936	1.915	1.970
UL	2.850	2.850	2.850	2.850	2.850	2.850



TID Unbiased HDR Report

Die lot: 1087518

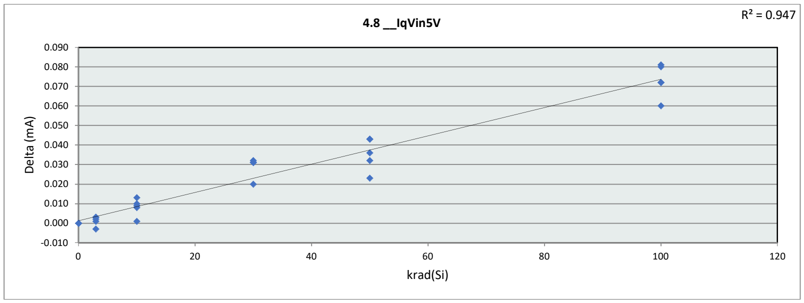
Exposure date: 11/15/2022

Assy Lot: 2517212

TPS7H4001-SHP

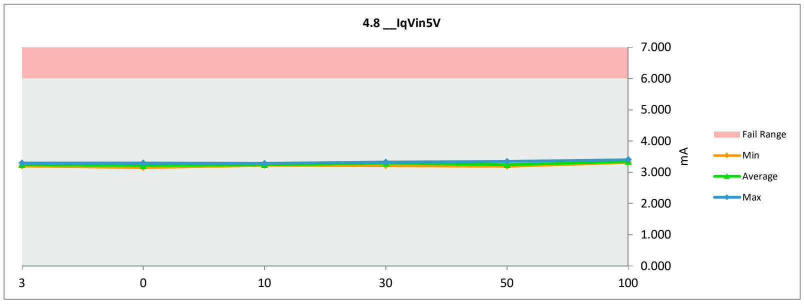
	4.8 __IqVin5V	
Test Site	unkins Lab - Dalla	unkins Lab - Dallas
Tester	TS364 - FETS3641	TS364 - FETS36412
Test Number	EB588003	EB588003
Unit	mA	mA
Max Limit	6	6
Min Limit		

krad(Si)	Serial #	Pre_Unbiased	Post_unbiased	Delta
100	27	3.288	3.360	0.072
100	28	3.255	3.315	0.060
100	29	3.333	3.405	0.072
100	30	3.245	3.326	0.081
100	31	3.240	3.320	0.080
50	41	3.150	3.193	0.043
50	42	3.323	3.346	0.023
50	43	3.210	3.253	0.043
50	44	3.198	3.230	0.032
50	45	3.180	3.216	0.036
30	51	3.298	3.329	0.031
30	52	3.187	3.218	0.031
30	53	3.301	3.321	0.020
30	54	3.287	3.318	0.031
30	55	3.250	3.282	0.032
10	61	3.210	3.220	0.010
10	62	3.280	3.288	0.008
10	63	3.240	3.241	0.001
10	64	3.219	3.228	0.009
10	65	3.210	3.223	0.013
3	71	3.264	3.267	0.003
3	72	3.270	3.273	0.003
3	73	3.202	3.203	0.001
3	74	3.206	3.208	0.002
3	75	3.300	3.297	-0.003
0	33	3.150	3.150	0.000
0	34	3.299	3.299	0.000
0	35	3.209	3.209	0.000
	Max	3.333	3.405	0.081
	Average	3.243	3.269	0.026
	Min	3.150	3.150	-0.003
	Std Dev	0.050	0.060	0.027



	4.8 __IqVin5V	
Test Site	unkins Lab - Dallas	
Tester	S364 - FETS36412	
Test Number	EB588003	
Max Limit	6	mA
Min Limit		mA

krad(Si)	3	0	10	30	50	100
LL						
Min	3.203	3.150	3.220	3.218	3.193	3.315
Average	3.250	3.219	3.240	3.294	3.248	3.345
Max	3.297	3.299	3.288	3.329	3.346	3.405
UL	6.000	6.000	6.000	6.000	6.000	6.000



TID Unbiased HDR Report

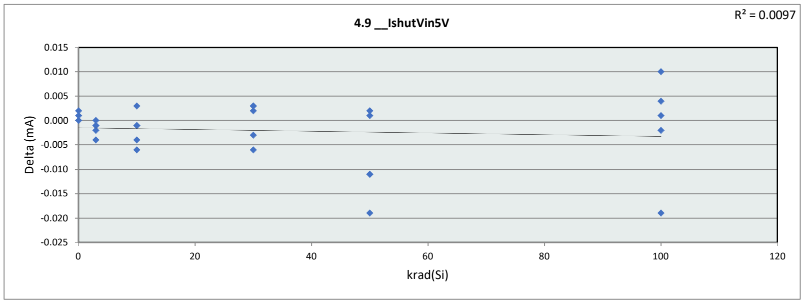
Die lot: 1087518
Assy Lot: 2517212

Exposure date: 11/15/2022

TPS7H4001-SHP

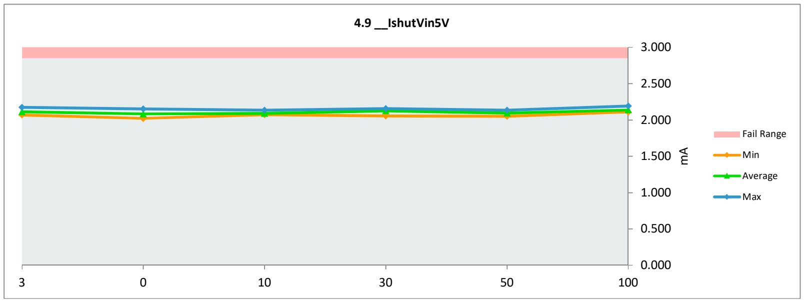
	4.9 __IshutVin5V	
Test Site	unkins Lab - Dalla	unkins Lab - Dallas
Tester	TS364 - FETS3641	TS364 - FETS36412
Test Number	EB588003	EB588003
Unit	mA	mA
Max Limit	2.85	2.85
Min Limit		

krad(Si)	Serial #	Pre_Unbiased	Post_unbiased	Delta
100	27	2.158	2.156	-0.002
100	28	2.128	2.109	-0.019
100	29	2.191	2.192	0.001
100	30	2.114	2.124	0.010
100	31	2.106	2.110	0.004
50	41	2.050	2.052	0.002
50	42	2.154	2.135	-0.019
50	43	2.103	2.104	0.001
50	44	2.115	2.104	-0.011
50	45	2.084	2.073	-0.011
30	51	2.155	2.157	0.002
30	52	2.062	2.056	-0.006
30	53	2.159	2.156	-0.003
30	54	2.155	2.158	0.003
30	55	2.096	2.099	0.003
10	61	2.074	2.073	-0.001
10	62	2.140	2.136	-0.004
10	63	2.096	2.090	-0.006
10	64	2.091	2.090	-0.001
10	65	2.072	2.075	0.003
3	71	2.113	2.113	0.000
3	72	2.120	2.119	-0.001
3	73	2.071	2.070	-0.001
3	74	2.089	2.087	-0.002
3	75	2.179	2.175	-0.004
0	33	2.022	2.022	0.000
0	34	2.150	2.152	0.002
0	35	2.077	2.078	0.001
	Max	2.191	2.192	0.010
	Average	2.112	2.109	-0.002
	Min	2.022	2.022	-0.019
	Std Dev	0.041	0.041	0.006



	4.9 __IshutVin5V	
Test Site	unkins Lab - Dallas	
Tester	S364 - FETS36412	
Test Number	EB588003	
Max Limit	2.85	mA
Min Limit		mA

krad(Si)	3	0	10	30	50	100
LL						
Min	2.070	2.022	2.073	2.056	2.052	2.109
Average	2.113	2.084	2.093	2.125	2.094	2.138
Max	2.175	2.152	2.136	2.158	2.135	2.192
UL	2.850	2.850	2.850	2.850	2.850	2.850



TID Unbiased HDR Report

Die lot: 1087518

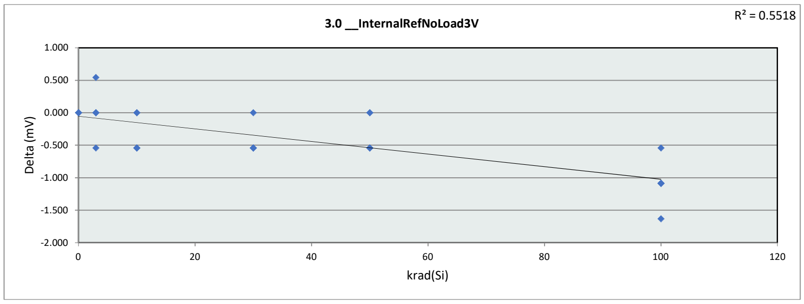
Assy Lot: 2517212

Exposure date: 11/15/2022

TPS7H4001-SHP

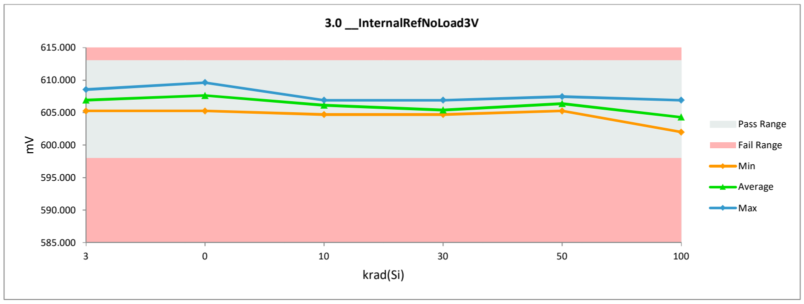
	3.0 __InternalRefNoLoad3V	
Test Site	unkins Lab - Dalla	unkins Lab - Dallas
Tester	TS364 - FETS3641	TS364 - FETS36412
Test Number	EB588003	EB588003
Unit	mV	mV
Max Limit	613	613
Min Limit	598	598

krad(Si)	Serial #	Pre_Unbiased	Post_unbiased	Delta
100	27	607.991	606.903	-1.088
100	28	605.271	604.184	-1.087
100	29	603.096	602.009	-1.087
100	30	604.728	603.096	-1.632
100	31	605.815	605.271	-0.544
50	41	606.903	606.359	-0.544
50	42	606.359	606.359	0.000
50	43	607.991	607.447	-0.544
50	44	605.271	605.271	0.000
50	45	606.903	606.359	-0.544
30	51	604.728	604.728	0.000
30	52	605.271	604.728	-0.543
30	53	605.815	605.271	-0.544
30	54	605.815	605.271	-0.544
30	55	607.447	606.903	-0.544
10	61	607.447	606.903	-0.544
10	62	605.271	604.728	-0.543
10	63	605.271	605.271	0.000
10	64	606.903	606.903	0.000
10	65	607.447	606.903	-0.544
3	71	607.447	607.447	0.000
3	72	607.991	608.534	0.543
3	73	606.359	605.815	-0.544
3	74	605.271	605.271	0.000
3	75	607.447	607.447	0.000
0	33	607.991	607.991	0.000
0	34	609.622	609.622	0.000
0	35	605.271	605.271	0.000
	Max	609.622	609.622	0.543
	Average	606.398	606.009	-0.388
	Min	603.096	602.009	-1.632
	Std Dev	1.404	1.616	0.465



	3.0 __InternalRefNoLoad3V	
Test Site	unkins Lab - Dallas	
Tester	S364 - FETS36412	
Test Number	EB588003	
Max Limit	613	mV
Min Limit	598	mV

krad(Si)	3	0	10	30	50	100
LL	598.000	598.000	598.000	598.000	598.000	598.000
Min	605.271	605.271	604.728	604.728	605.271	602.009
Average	606.903	607.628	606.142	605.380	606.359	604.293
Max	608.534	609.622	606.903	606.903	607.447	606.903
UL	613.000	613.000	613.000	613.000	613.000	613.000



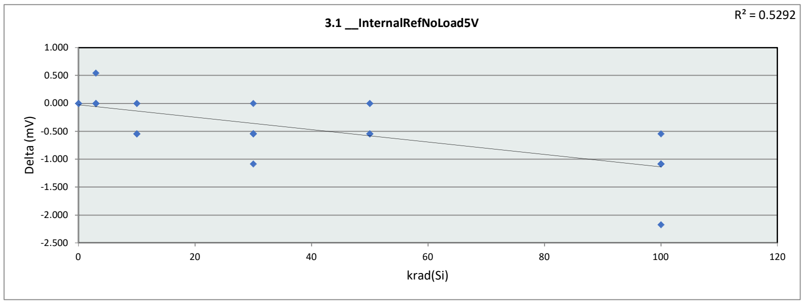
TID Unbiased HDR Report

Die lot: 1087518
Assy Lot: 2517212

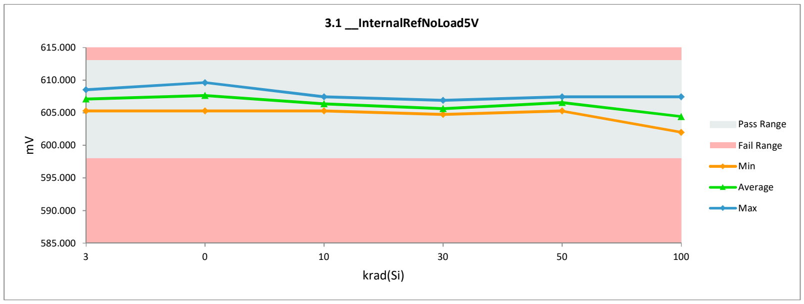
Exposure date: 11/15/2022

TPS7H4001-SHP

		3.1 __InternalRefNoLoad5V		
	Test Site	unkins Lab - Dalla	unkins Lab - Dallas	
	Tester	TS364 - FETS3641	TS364 - FETS36412	
	Test Number	EB588003	EB588003	
	Unit	mV	mV	
	Max Limit	613	613	
	Min Limit	598	598	
krad(Si)	Serial #	Pre_Unbiased	Post_unbiased	Delta
100	27	607.991	607.447	-0.544
100	28	605.271	604.184	-1.087
100	29	603.096	602.009	-1.087
100	30	605.271	603.096	-2.175
100	31	606.359	605.271	-1.088
50	41	606.903	606.359	-0.544
50	42	606.903	606.903	0.000
50	43	607.991	607.447	-0.544
50	44	605.815	605.271	-0.544
50	45	606.903	606.903	0.000
30	51	605.271	604.728	-0.543
30	52	605.815	605.271	-0.544
30	53	606.359	605.271	-1.088
30	54	605.815	605.815	0.000
30	55	607.447	606.903	-0.544
10	61	607.447	607.447	0.000
10	62	605.271	605.271	0.000
10	63	605.815	605.271	-0.544
10	64	607.447	606.903	-0.544
10	65	607.447	606.903	-0.544
3	71	607.447	607.447	0.000
3	72	608.534	608.534	0.000
3	73	606.359	606.359	0.000
3	74	605.271	605.271	0.000
3	75	607.447	607.991	0.544
0	33	607.991	607.991	0.000
0	34	609.622	609.622	0.000
0	35	605.271	605.271	0.000
	Max	609.622	609.622	0.544
	Average	606.592	606.184	-0.408
	Min	603.096	602.009	-2.175
	Std Dev	1.344	1.642	0.546



	3.1 __InternalRefNoLoad5V					
Test Site	unkins Lab - Dallas					
Tester	S364 - FETS36412					
Test Number	EB588003					
Max Limit	613	mV				
Min Limit	598	mV				
krad(Si)	3	0	10	30	50	100
LL	598.000	598.000	598.000	598.000	598.000	598.000
Min	605.271	605.271	605.271	604.728	605.271	602.009
Average	607.120	607.628	606.359	605.598	606.577	604.401
Max	608.534	609.622	607.447	606.903	607.447	607.447
UL	613.000	613.000	613.000	613.000	613.000	613.000



TID Unbiased HDR Report

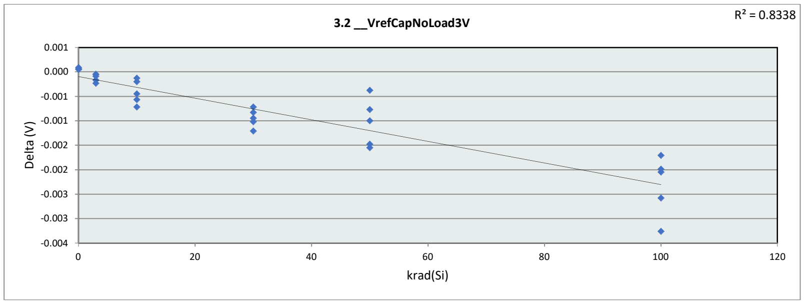
Die lot: 1087518

Assy Lot: 2517212

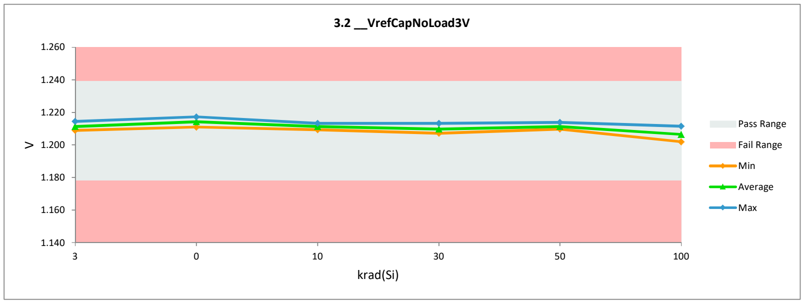
Exposure date: 11/15/2022

TPS7H4001-SHP

		3.2 __VrefCapNoLoad3V		
	Test Site	unkins Lab - Dalla	unkins Lab - Dallas	
	Tester	TS364 - FETS3641	TS364 - FETS36412	
	Test Number	EB588003	EB588003	
	Unit	V	V	
	Max Limit	1.239	1.239	
	Min Limit	1.178	1.178	
krad(Si)	Serial #	Pre_Unbiased	Post_unbiased	Delta
100	27	1.214	1.212	-0.002
100	28	1.209	1.207	-0.002
100	29	1.205	1.202	-0.003
100	30	1.208	1.205	-0.003
100	31	1.209	1.207	-0.002
50	41	1.212	1.211	-0.002
50	42	1.211	1.211	0.000
50	43	1.215	1.214	-0.001
50	44	1.211	1.210	-0.001
50	45	1.212	1.211	-0.001
30	51	1.208	1.207	-0.001
30	52	1.209	1.209	-0.001
30	53	1.211	1.210	-0.001
30	54	1.211	1.210	-0.001
30	55	1.214	1.213	-0.001
10	61	1.214	1.213	0.000
10	62	1.209	1.209	0.000
10	63	1.210	1.210	0.000
10	64	1.213	1.213	-0.001
10	65	1.212	1.212	-0.001
3	71	1.211	1.211	0.000
3	72	1.215	1.215	0.000
3	73	1.211	1.211	0.000
3	74	1.209	1.209	0.000
3	75	1.212	1.211	0.000
0	33	1.215	1.215	0.000
0	34	1.217	1.217	0.000
0	35	1.211	1.211	0.000
	Max	1.217	1.217	0.000
	Average	1.211	1.210	-0.001
	Min	1.205	1.202	-0.003
	Std Dev	0.003	0.003	0.001



	3.2 __VrefCapNoLoad3V					
Test Site	unkins Lab - Dallas					
Tester	TS364 - FETS36412					
Test Number	EB588003					
Max Limit	1.239	V				
Min Limit	1.178	V				
krad(Si)	3	0	10	30	50	100
LL	1.178	1.178	1.178	1.178	1.178	1.178
Min	1.209	1.211	1.209	1.207	1.210	1.202
Average	1.211	1.214	1.211	1.210	1.211	1.206
Max	1.215	1.217	1.213	1.213	1.214	1.212
UL	1.239	1.239	1.239	1.239	1.239	1.239



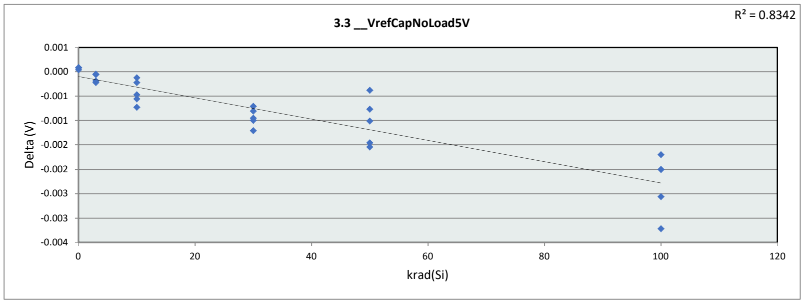
TID Unbiased HDR Report

Die lot: 1087518
Assy Lot: 2517212

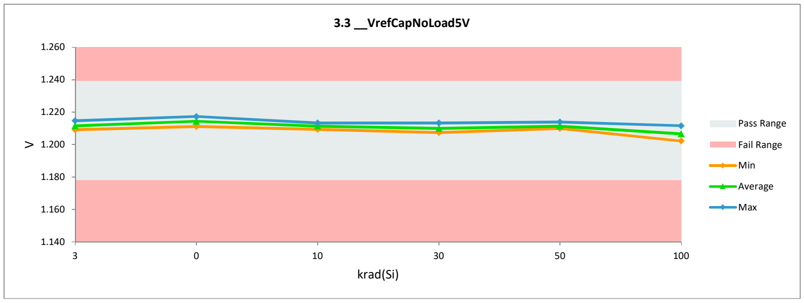
Exposure date: 11/15/2022

TPS7H4001-SHP

		3.3 __VrefCapNoLoad5V		
	Test Site	unkins Lab - Dalla	unkins Lab - Dallas	
	Tester	TS364 - FETS3641	TS364 - FETS36412	
	Test Number	EB588003	EB588003	
	Unit	V	V	
	Max Limit	1.239	1.239	
	Min Limit	1.178	1.178	
krad(Si)	Serial #	Pre_Unbiased	Post_unbiased	Delta
100	27	1.214	1.212	-0.002
100	28	1.209	1.207	-0.002
100	29	1.205	1.202	-0.003
100	30	1.208	1.205	-0.003
100	31	1.209	1.207	-0.002
50	41	1.212	1.211	-0.002
50	42	1.211	1.211	0.000
50	43	1.215	1.214	-0.001
50	44	1.211	1.210	-0.001
50	45	1.212	1.211	-0.001
30	51	1.208	1.207	-0.001
30	52	1.209	1.209	-0.001
30	53	1.211	1.210	-0.001
30	54	1.211	1.210	-0.001
30	55	1.215	1.213	-0.001
10	61	1.214	1.213	0.000
10	62	1.210	1.209	0.000
10	63	1.210	1.210	0.000
10	64	1.213	1.213	-0.001
10	65	1.212	1.212	-0.001
3	71	1.211	1.211	0.000
3	72	1.215	1.215	0.000
3	73	1.211	1.211	0.000
3	74	1.209	1.209	0.000
3	75	1.212	1.212	0.000
0	33	1.215	1.215	0.000
0	34	1.217	1.217	0.000
0	35	1.211	1.211	0.000
	Max	1.217	1.217	0.000
	Average	1.211	1.211	-0.001
	Min	1.205	1.202	-0.003
	Std Dev	0.003	0.003	0.001



	3.3 __VrefCapNoLoad5V					
Test Site	unkins Lab - Dallas					
Tester	TS364 - FETS36412					
Test Number	EB588003					
Max Limit	1.239	V				
Min Limit	1.178	V				
krad(Si)	3	0	10	30	50	100
LL	1.178	1.178	1.178	1.178	1.178	1.178
Min	1.209	1.211	1.209	1.207	1.210	1.202
Average	1.211	1.214	1.211	1.210	1.211	1.207
Max	1.215	1.217	1.213	1.213	1.214	1.212
UL	1.239	1.239	1.239	1.239	1.239	1.239



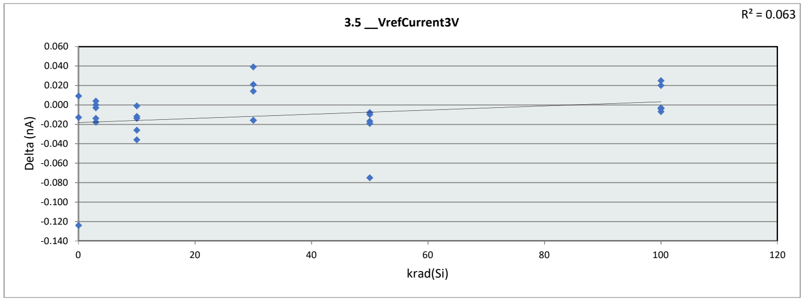
TID Unbiased HDR Report

Die lot: 1087518
Assy Lot: 2517212

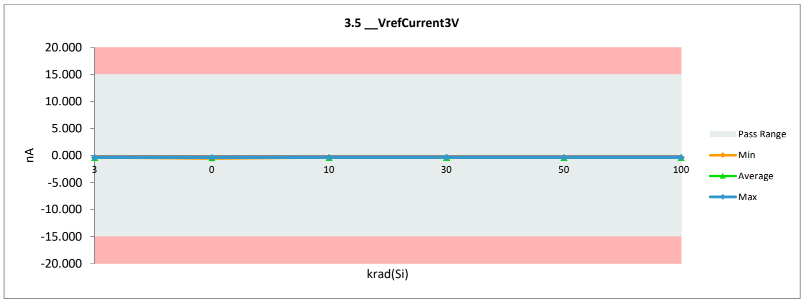
Exposure date: 11/15/2022

TPS7H4001-SHP

		3.5 __VrefCurrent3V		
	Test Site	unkins Lab - Dalla	unkins Lab - Dallas	
	Tester	TS364 - FETS3641	TS364 - FETS36412	
	Test Number	EB588003	EB588003	
	Unit	nA	nA	
	Max Limit	15	15	
	Min Limit	-15	-15	
krad(Si)	Serial #	Pre_Unbiased	Post_unbiased	Delta
100	27	-0.381	-0.361	0.020
100	28	-0.365	-0.369	-0.004
100	29	-0.387	-0.362	0.025
100	30	-0.373	-0.380	-0.007
100	31	-0.370	-0.373	-0.003
50	41	-0.371	-0.379	-0.008
50	42	-0.307	-0.382	-0.075
50	43	-0.357	-0.376	-0.019
50	44	-0.368	-0.385	-0.017
50	45	-0.358	-0.368	-0.010
30	51	-0.384	-0.363	0.021
30	52	-0.375	-0.336	0.039
30	53	-0.375	-0.391	-0.016
30	54	-0.393	-0.379	0.014
30	55	-0.370	-0.386	-0.016
10	61	-0.361	-0.397	-0.036
10	62	-0.370	-0.396	-0.026
10	63	-0.377	-0.391	-0.014
10	64	-0.367	-0.368	-0.001
10	65	-0.371	-0.383	-0.012
3	71	-0.380	-0.380	0.000
3	72	-0.334	-0.352	-0.018
3	73	-0.373	-0.387	-0.014
3	74	-0.372	-0.375	-0.003
3	75	-0.387	-0.383	0.004
0	33	-0.366	-0.357	0.009
0	34	-0.366	-0.379	-0.013
0	35	-0.364	-0.488	-0.124
	Max	-0.307	-0.336	0.039
	Average	-0.369	-0.379	-0.011
	Min	-0.393	-0.488	-0.124
	Std Dev	0.017	0.025	0.031



	3.5 __VrefCurrent3V					
Test Site	unkins Lab - Dallas					
Tester	S364 - FETS36412					
Test Number	EB588003					
Max Limit	15	nA				
Min Limit	-15	nA				
krad(Si)	3	0	10	30	50	100
LL	-15.000	-15.000	-15.000	-15.000	-15.000	-15.000
Min	-0.387	-0.488	-0.397	-0.391	-0.385	-0.380
Average	-0.375	-0.408	-0.387	-0.371	-0.378	-0.369
Max	-0.352	-0.357	-0.368	-0.336	-0.368	-0.361
UL	15.000	15.000	15.000	15.000	15.000	15.000



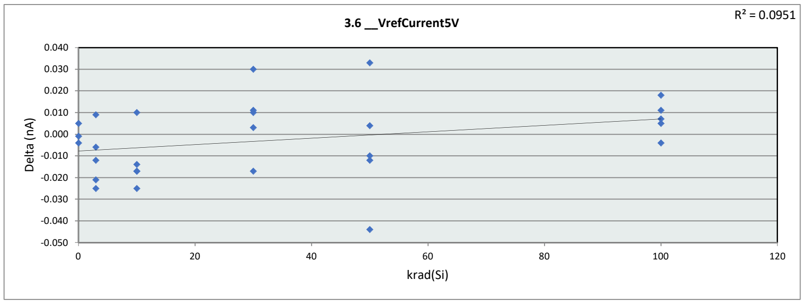
TID Unbiased HDR Report

Die lot: 1087518
Assy Lot: 2517212

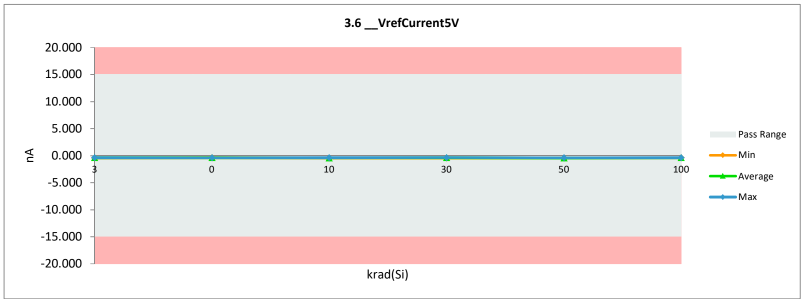
Exposure date: 11/15/2022

TPS7H4001-SHP

		3.6 __VrefCurrent5V		
	Test Site	unkins Lab - Dalla	unkins Lab - Dallas	
	Tester	TS364 - FETS364	TS364 - FETS36412	
	Test Number	EB588003	EB588003	
	Unit	nA	nA	
	Max Limit	15	15	
	Min Limit	-15	-15	
krad(Si)	Serial #	Pre_Unbiased	Post_unbiased	Delta
100	27	-0.400	-0.382	0.018
100	28	-0.390	-0.394	-0.004
100	29	-0.397	-0.392	0.005
100	30	-0.384	-0.377	0.007
100	31	-0.397	-0.386	0.011
50	41	-0.392	-0.404	-0.012
50	42	-0.431	-0.398	0.033
50	43	-0.386	-0.396	-0.010
50	44	-0.402	-0.398	0.004
50	45	-0.385	-0.429	-0.044
30	51	-0.408	-0.398	0.010
30	52	-0.381	-0.351	0.030
30	53	-0.395	-0.412	-0.017
30	54	-0.418	-0.407	0.011
30	55	-0.387	-0.384	0.003
10	61	-0.384	-0.401	-0.017
10	62	-0.397	-0.411	-0.014
10	63	-0.401	-0.418	-0.017
10	64	-0.402	-0.392	0.010
10	65	-0.380	-0.405	-0.025
3	71	-0.399	-0.405	-0.006
3	72	-0.349	-0.374	-0.025
3	73	-0.379	-0.400	-0.021
3	74	-0.405	-0.396	0.009
3	75	-0.391	-0.403	-0.012
0	33	-0.394	-0.398	-0.004
0	34	-0.401	-0.396	0.005
0	35	-0.395	-0.396	-0.001
	Max	-0.349	-0.351	0.033
	Average	-0.394	-0.397	-0.003
	Min	-0.431	-0.429	-0.044
	Std Dev	0.014	0.015	0.017



	3.6 __VrefCurrent5V					
Test Site	unkins Lab - Dallas					
Tester	TS364 - FETS36412					
Test Number	EB588003					
Max Limit	15	nA				
Min Limit	-15	nA				
krad(Si)	3	0	10	30	50	100
LL	-15.000	-15.000	-15.000	-15.000	-15.000	-15.000
Min	-0.405	-0.398	-0.418	-0.412	-0.429	-0.394
Average	-0.396	-0.397	-0.405	-0.390	-0.405	-0.386
Max	-0.374	-0.396	-0.392	-0.351	-0.396	-0.377
UL	15.000	15.000	15.000	15.000	15.000	15.000



TID Unbiased HDR Report

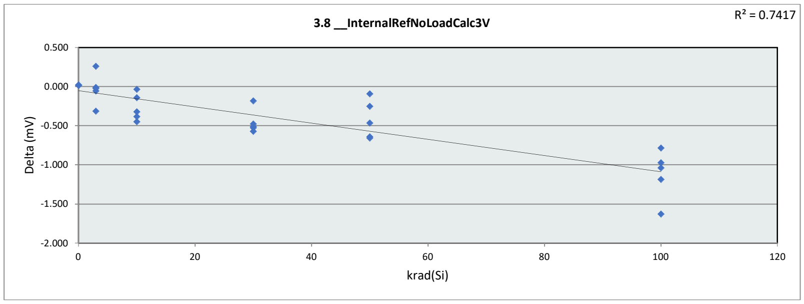
Die lot: 1087518
Assy Lot: 2517212

Exposure date: 11/15/2022

TPS7H4001-SHP

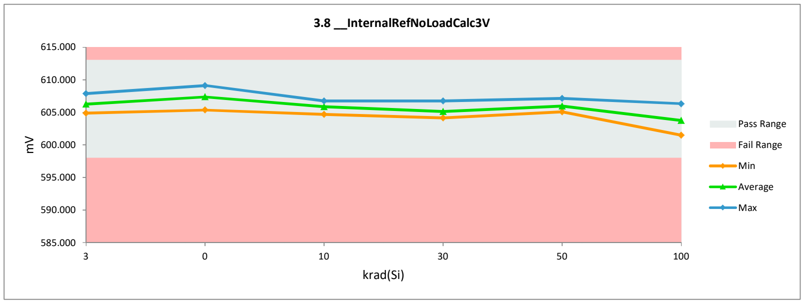
	3.8 __InternalRefNoLoadCalc3V	
Test Site	unkins Lab - Dalla	unkins Lab - Dallas
Tester	TS364 - FETS3641	TS364 - FETS36412
Test Number	EB588003	EB588003
Unit	mV	mV
Max Limit	613	613
Min Limit	598	598

krad(Si)	Serial #	Pre_Unbiased	Post_unbiased	Delta
100	27	607.370	606.330	-1.040
100	28	604.857	603.885	-0.972
100	29	602.680	601.492	-1.188
100	30	604.338	602.708	-1.630
100	31	605.124	604.340	-0.784
50	41	606.541	605.881	-0.660
50	42	605.979	605.884	-0.095
50	43	607.809	607.166	-0.643
50	44	605.318	605.067	-0.251
50	45	606.413	605.949	-0.464
30	51	604.355	604.173	-0.182
30	52	604.970	604.491	-0.479
30	53	605.559	605.032	-0.527
30	54	605.648	605.138	-0.510
30	55	607.328	606.755	-0.573
10	61	607.129	606.744	-0.385
10	62	604.998	604.675	-0.323
10	63	605.111	605.077	-0.034
10	64	606.730	606.586	-0.144
10	65	606.778	606.327	-0.451
3	71	606.516	606.493	-0.023
3	72	607.638	607.896	0.258
3	73	605.849	605.534	-0.315
3	74	604.938	604.880	-0.058
3	75	606.603	606.592	-0.011
0	33	607.623	607.639	0.016
0	34	609.097	609.118	0.021
0	35	605.355	605.368	0.013
	Max	609.097	609.118	0.258
	Average	606.023	605.615	-0.408
	Min	602.680	601.492	-1.630
	Std Dev	1.348	1.570	0.428



	3.8 __InternalRefNoLoadCalc3	
Test Site	unkins Lab - Dallas	
Tester	S364 - FETS36412	
Test Number	EB588003	
Max Limit	613	mV
Min Limit	598	mV

krad(Si)	3	0	10	30	50	100
LL	598.000	598.000	598.000	598.000	598.000	598.000
Min	604.880	605.368	604.675	604.173	605.067	601.492
Average	606.279	607.375	605.882	605.118	605.989	603.751
Max	607.896	609.118	606.744	606.755	607.166	606.330
UL	613.000	613.000	613.000	613.000	613.000	613.000



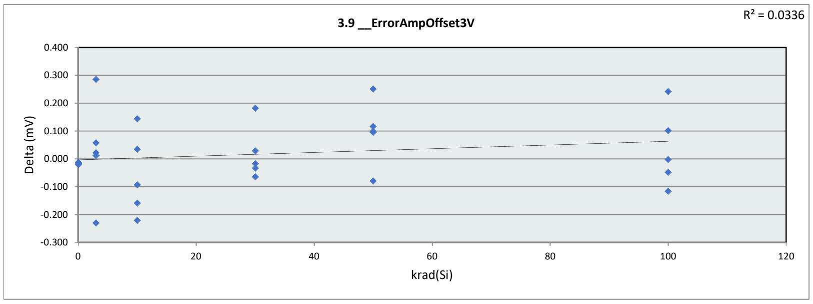
TID Unbiased HDR Report

Die lot: 1087518
Assy Lot: 2517212

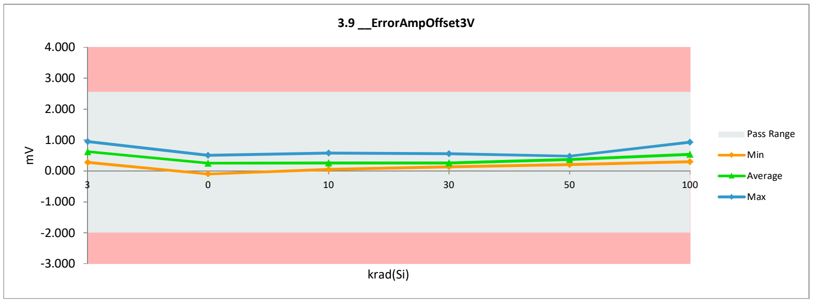
Exposure date: 11/15/2022

TPS7H4001-SHP

		3.9 __ErrorAmpOffset3V		
	Test Site	unkins Lab - Dalla	unkins Lab - Dallas	
	Tester	TS364 - FETS3641	TS364 - FETS36412	
	Test Number	EB588003	EB588003	
	Unit	mV	mV	
	Max Limit	2.55	2.55	
	Min Limit	-2	-2	
krad(Si)	Serial #	Pre_Unbiased	Post_unbiased	Delta
100	27	0.621	0.573	-0.048
100	28	0.415	0.299	-0.116
100	29	0.416	0.517	0.101
100	30	0.390	0.388	-0.002
100	31	0.691	0.932	0.241
50	41	0.362	0.478	0.116
50	42	0.380	0.475	0.095
50	43	0.182	0.281	0.099
50	44	-0.047	0.204	0.251
50	45	0.490	0.410	-0.080
30	51	0.373	0.555	0.182
30	52	0.301	0.237	-0.064
30	53	0.256	0.239	-0.017
30	54	0.167	0.134	-0.033
30	55	0.119	0.148	0.029
10	61	0.318	0.159	-0.159
10	62	0.273	0.052	-0.221
10	63	0.160	0.194	0.034
10	64	0.173	0.317	0.144
10	65	0.669	0.576	-0.093
3	71	0.931	0.953	0.022
3	72	0.353	0.638	0.285
3	73	0.511	0.281	-0.230
3	74	0.334	0.391	0.057
3	75	0.844	0.855	0.011
0	33	0.368	0.352	-0.016
0	34	0.525	0.504	-0.021
0	35	-0.083	-0.096	-0.013
	Max	0.931	0.953	0.285
	Average	0.375	0.395	0.020
	Min	-0.083	-0.096	-0.230
	Std Dev	0.235	0.252	0.130



	3.9 __ErrorAmpOffset3V					
Test Site	unkins Lab - Dallas					
Tester	TS364 - FETS36412					
Test Number	EB588003					
Max Limit	2.55	mV				
Min Limit	-2	mV				
krad(Si)	3	0	10	30	50	100
LL	-2.000	-2.000	-2.000	-2.000	-2.000	-2.000
Min	0.281	-0.096	0.052	0.134	0.204	0.299
Average	0.624	0.253	0.260	0.263	0.370	0.542
Max	0.953	0.504	0.576	0.555	0.478	0.932
UL	2.550	2.550	2.550	2.550	2.550	2.550



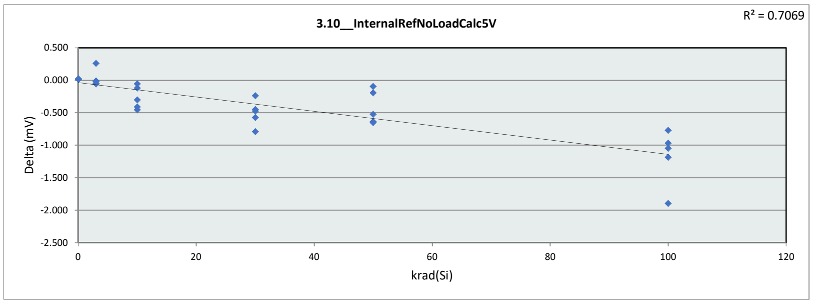
TID Unbiased HDR Report

Die lot: 1087518
Assy Lot: 2517212

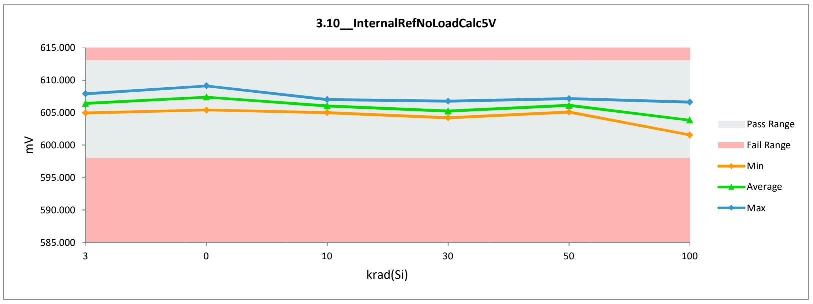
Exposure date: 11/15/2022

TPS7H4001-SHP

		3.10__InternalRefNoLoadCalc5V		
	Test Site	unkins Lab - Dalla	unkins Lab - Dallas	
	Tester	TS364 - FETS3641	TS364 - FETS36412	
	Test Number	EB588003	EB588003	
	Unit	mV	mV	
	Max Limit	613	613	
	Min Limit	598	598	
krad(Si)	Serial #	Pre_Unbiased	Post_unbiased	Delta
100	27	607.398	606.625	-0.773
100	28	604.896	603.927	-0.969
100	29	602.738	601.555	-1.183
100	30	604.665	602.772	-1.893
100	31	605.425	604.379	-1.046
50	41	606.570	605.915	-0.655
50	42	606.278	606.182	-0.096
50	43	607.823	607.186	-0.637
50	44	605.637	605.112	-0.525
50	45	606.444	606.252	-0.192
30	51	604.677	604.228	-0.449
30	52	605.283	604.807	-0.476
30	53	605.876	605.083	-0.793
30	54	605.661	605.423	-0.238
30	55	607.365	606.792	-0.573
10	61	607.149	607.031	-0.118
10	62	605.045	604.990	-0.055
10	63	605.425	605.122	-0.303
10	64	607.034	606.622	-0.412
10	65	606.816	606.360	-0.456
3	71	606.540	606.525	-0.015
3	72	607.931	607.920	-0.011
3	73	605.869	605.821	-0.048
3	74	604.983	604.928	-0.055
3	75	606.650	606.911	0.261
0	33	607.634	607.654	0.020
0	34	609.107	609.129	0.022
0	35	605.401	605.412	0.011
	Max	609.107	609.129	0.261
	Average	606.154	605.738	-0.416
	Min	602.738	601.555	-1.893
	Std Dev	1.306	1.569	0.468



	3.10__InternalRefNoLoadCalc					
Test Site	unkins Lab - Dallas					
Tester	S364 - FETS36412					
Test Number	EB588003					
Max Limit	613	mV				
Min Limit	598	mV				
krad(Si)	3	0	10	30	50	100
LL	598.000	598.000	598.000	598.000	598.000	598.000
Min	604.928	605.412	604.990	604.228	605.112	601.555
Average	606.421	607.398	606.025	605.267	606.129	603.852
Max	607.920	609.129	607.031	606.792	607.186	606.625
UL	613.000	613.000	613.000	613.000	613.000	613.000



TID Unbiased HDR Report

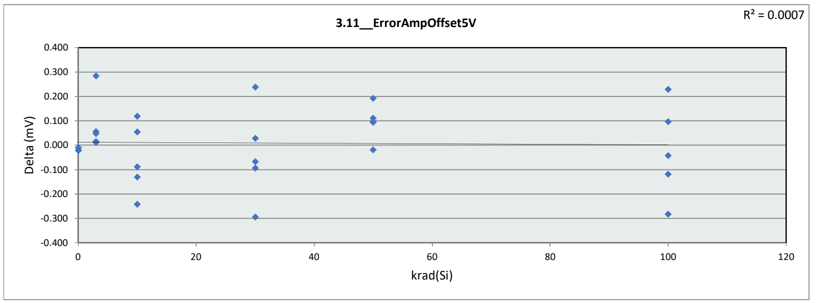
Die lot: 1087518

Assy Lot: 2517212

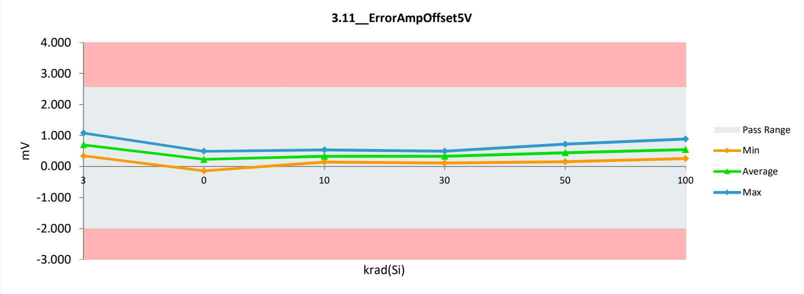
Exposure date: 11/15/2022

TPS7H4001-SHP

		3.11__ErrorAmpOffset5V		
	Test Site	unkins Lab - Dalla	unkins Lab - Dallas	
	Tester	TS364 - FETS3641	TS364 - FETS36412	
	Test Number	EB588003	EB588003	
	Unit	mV	mV	
	Max Limit	2.55	2.55	
	Min Limit	-2	-2	
krad(Si)	Serial #	Pre_Unbiased	Post_unbiased	Delta
100	27	0.593	0.822	0.229
100	28	0.376	0.257	-0.119
100	29	0.358	0.454	0.096
100	30	0.606	0.324	-0.282
100	31	0.934	0.892	-0.042
50	41	0.333	0.444	0.111
50	42	0.625	0.721	0.096
50	43	0.167	0.261	0.094
50	44	0.178	0.159	-0.019
50	45	0.459	0.651	0.192
30	51	0.594	0.500	-0.094
30	52	0.532	0.464	-0.068
30	53	0.483	0.189	-0.294
30	54	0.154	0.392	0.238
30	55	0.082	0.110	0.028
10	61	0.297	0.416	0.119
10	62	0.227	0.281	0.054
10	63	0.391	0.149	-0.242
10	64	0.412	0.281	-0.131
10	65	0.631	0.543	-0.088
3	71	0.907	0.922	0.015
3	72	0.603	0.614	0.011
3	73	0.490	0.538	0.048
3	74	0.289	0.344	0.055
3	75	0.796	1.080	0.284
0	33	0.357	0.337	-0.020
0	34	0.515	0.493	-0.022
0	35	-0.130	-0.140	-0.010
	Max	0.934	1.080	0.284
	Average	0.438	0.446	0.009
	Min	-0.130	-0.140	-0.294
	Std Dev	0.242	0.272	0.145



	3.11__ErrorAmpOffset5V					
Test Site	unkins Lab - Dallas					
Tester	S364 - FETS36412					
Test Number	EB588003					
Max Limit	2.55	mV				
Min Limit	-2	mV				
krad(Si)	3	0	10	30	50	100
LL	-2.000	-2.000	-2.000	-2.000	-2.000	-2.000
Min	0.344	-0.140	0.149	0.110	0.159	0.257
Average	0.700	0.230	0.334	0.331	0.447	0.550
Max	1.080	0.493	0.543	0.500	0.721	0.892
UL	2.550	2.550	2.550	2.550	2.550	2.550



TID Unbiased HDR Report

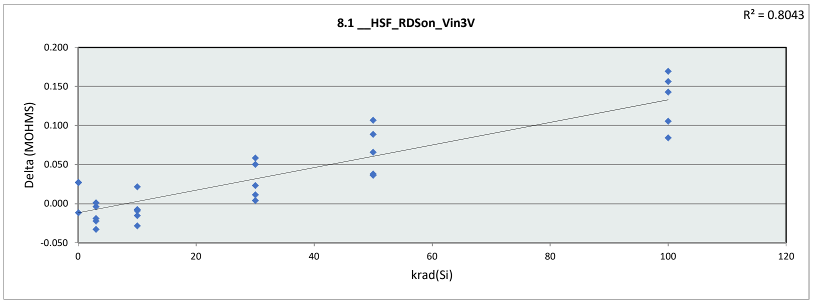
Die lot: 1087518
Assy Lot: 2517212

Exposure date: 11/15/2022

TPS7H4001-SHP

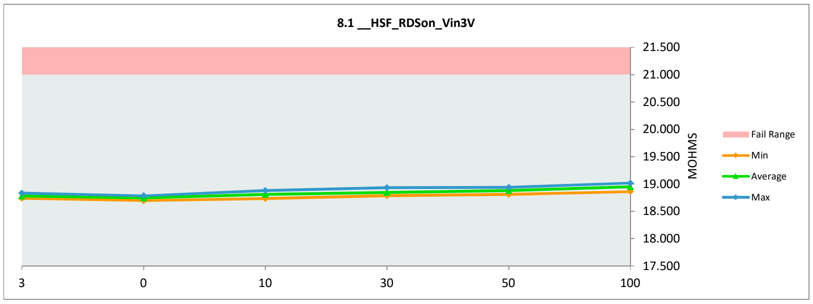
	8.1 __HSF_RDSon_Vin3V	
Test Site	unkins Lab - Dalla	unkins Lab - Dallas
Tester	TS364 - FETS3641	TS364 - FETS36412
Test Number	EB588003	EB588003
Unit	MOHMS	MOHMS
Max Limit	21	21
Min Limit		

krad(Si)	Serial #	Pre_Unbiased	Post_unbiased	Delta
100	27	18.775	18.860	0.084
100	28	18.846	18.952	0.106
100	29	18.848	19.017	0.169
100	30	18.777	18.933	0.156
100	31	18.843	18.985	0.143
50	41	18.718	18.807	0.089
50	42	18.804	18.870	0.066
50	43	18.850	18.886	0.036
50	44	18.857	18.895	0.038
50	45	18.834	18.941	0.107
30	51	18.791	18.795	0.004
30	52	18.874	18.933	0.059
30	53	18.832	18.882	0.050
30	54	18.810	18.821	0.011
30	55	18.766	18.789	0.023
10	61	18.741	18.763	0.022
10	62	18.890	18.882	-0.007
10	63	18.884	18.875	-0.009
10	64	18.751	18.736	-0.015
10	65	18.807	18.778	-0.029
3	71	18.853	18.834	-0.019
3	72	18.795	18.773	-0.022
3	73	18.741	18.742	0.001
3	74	18.794	18.790	-0.004
3	75	18.791	18.758	-0.033
0	33	18.757	18.784	0.027
0	34	18.667	18.694	0.027
0	35	18.769	18.757	-0.012
	Max	18.890	19.017	0.169
	Average	18.802	18.840	0.038
	Min	18.667	18.694	-0.033
	Std Dev	0.053	0.083	0.057



	8.1 __HSF_RDSon_Vin3V	
Test Site	unkins Lab - Dallas	
Tester	TS364 - FETS36412	
Test Number	EB588003	
Max Limit	21	MOHMS
Min Limit		MOHMS

krad(Si)	3	0	10	30	50	100
LL						
Min	18.742	18.695	18.736	18.789	18.807	18.860
Average	18.779	18.745	18.807	18.844	18.880	18.949
Max	18.834	18.784	18.883	18.933	18.941	19.017
UL	21.000	21.000	21.000	21.000	21.000	21.000



TID Unbiased HDR Report

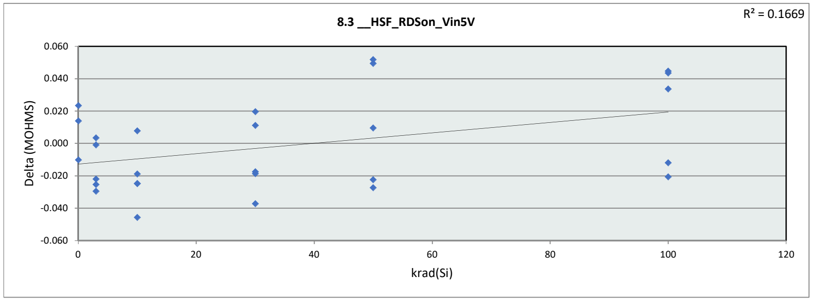
Die lot: 1087518
Assy Lot: 2517212

Exposure date: 11/15/2022

TPS7H4001-SHP

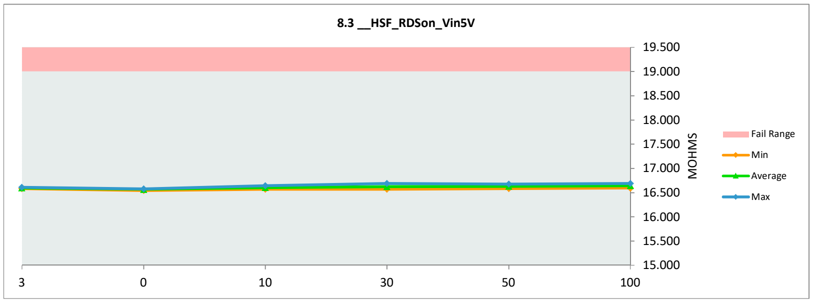
	8.3 __HSF_RDSon_Vin5V	
Test Site	unkins Lab - Dalla	unkins Lab - Dallas
Tester	TS364 - FETS3641	TS364 - FETS36412
Test Number	EB588003	EB588003
Unit	MOHMS	MOHMS
Max Limit	19	19
Min Limit		

krad(Si)	Serial #	Pre_Unbiased	Post_unbiased	Delta
100	27	16.603	16.591	-0.012
100	28	16.651	16.630	-0.021
100	29	16.645	16.688	0.044
100	30	16.584	16.628	0.045
100	31	16.638	16.672	0.034
50	41	16.537	16.586	0.049
50	42	16.617	16.626	0.009
50	43	16.658	16.635	-0.022
50	44	16.652	16.624	-0.027
50	45	16.624	16.676	0.052
30	51	16.610	16.572	-0.037
30	52	16.669	16.689	0.020
30	53	16.662	16.673	0.011
30	54	16.622	16.604	-0.017
30	55	16.599	16.581	-0.019
10	61	16.577	16.585	0.008
10	62	16.665	16.640	-0.025
10	63	16.662	16.643	-0.019
10	64	16.601	16.576	-0.025
10	65	16.617	16.571	-0.046
3	71	16.635	16.613	-0.022
3	72	16.610	16.585	-0.025
3	73	16.579	16.583	0.003
3	74	16.597	16.596	-0.001
3	75	16.619	16.590	-0.029
0	33	16.553	16.576	0.023
0	34	16.527	16.540	0.014
0	35	16.587	16.577	-0.010
	Max	16.669	16.689	0.052
	Average	16.614	16.613	-0.002
	Min	16.527	16.540	-0.046
	Std Dev	0.038	0.040	0.028



	8.3 __HSF_RDSon_Vin5V	
Test Site	unkins Lab - Dallas	
Tester	S364 - FETS36412	
Test Number	EB588003	
Max Limit	19	MOHMS
Min Limit		MOHMS

krad(Si)	3	0	10	30	50	100
LL						
Min	16.583	16.540	16.571	16.572	16.586	16.591
Average	16.593	16.565	16.603	16.624	16.630	16.642
Max	16.613	16.577	16.644	16.689	16.676	16.688
UL	19.000	19.000	19.000	19.000	19.000	19.000



TID Unbiased HDR Report

Die lot: 1087518

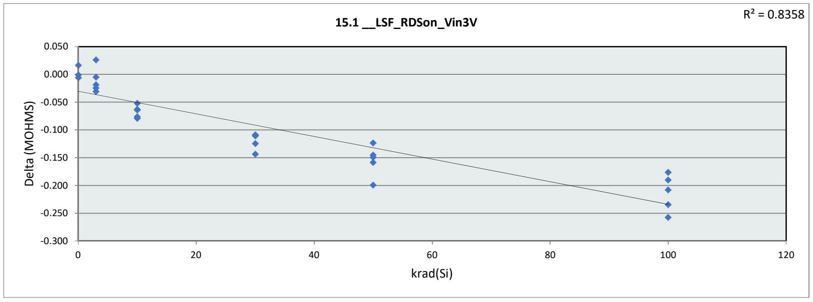
Assy Lot: 2517212

Exposure date: 11/15/2022

TPS7H4001-SHP

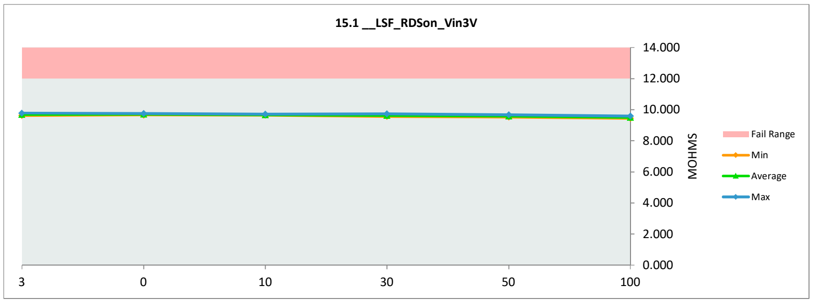
	15.1 __LSF_RDSon_Vin3V	
Test Site	unkins Lab - Dalla	unkins Lab - Dallas
Tester	TS364 - FETS3641	TS364 - FETS36412
Test Number	EB588003	EB588003
Unit	MOHMS	MOHMS
Max Limit	12	12
Min Limit		

krad(Si)	Serial #	Pre_Unbiased	Post_unbiased	Delta
100	27	9.808	9.550	-0.258
100	28	9.681	9.446	-0.235
100	29	9.769	9.592	-0.177
100	30	9.648	9.458	-0.190
100	31	9.720	9.511	-0.208
50	41	9.756	9.606	-0.150
50	42	9.661	9.538	-0.123
50	43	9.813	9.668	-0.145
50	44	9.744	9.586	-0.158
50	45	9.787	9.588	-0.200
30	51	9.729	9.585	-0.144
30	52	9.723	9.598	-0.125
30	53	9.854	9.745	-0.109
30	54	9.690	9.581	-0.109
30	55	9.746	9.635	-0.111
10	61	9.723	9.670	-0.052
10	62	9.729	9.665	-0.064
10	63	9.793	9.714	-0.079
10	64	9.780	9.717	-0.064
10	65	9.730	9.653	-0.076
3	71	9.687	9.662	-0.024
3	72	9.689	9.684	-0.005
3	73	9.736	9.705	-0.031
3	74	9.661	9.642	-0.019
3	75	9.755	9.781	0.026
0	33	9.711	9.705	-0.006
0	34	9.735	9.751	0.016
0	35	9.663	9.662	-0.001
	Max	9.854	9.781	0.026
	Average	9.733	9.632	-0.101
	Min	9.648	9.446	-0.258
	Std Dev	0.051	0.084	0.079



	15.1 __LSF_RDSon_Vin3V	
Test Site	unkins Lab - Dallas	
Tester	TS364 - FETS36412	
Test Number	EB588003	
Max Limit	12	MOHMS
Min Limit		MOHMS

krad(Si)	3	0	10	30	50	100
LL						
Min	9.642	9.662	9.653	9.581	9.538	9.446
Average	9.695	9.706	9.684	9.629	9.597	9.512
Max	9.781	9.751	9.717	9.745	9.668	9.593
UL	12.000	12.000	12.000	12.000	12.000	12.000



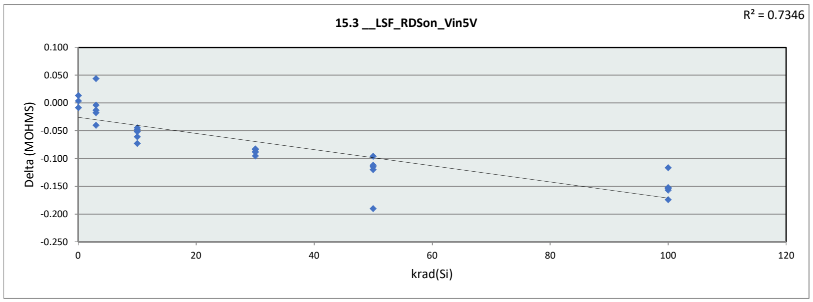
TID Unbiased HDR Report

Die lot: 1087518
Assy Lot: 2517212

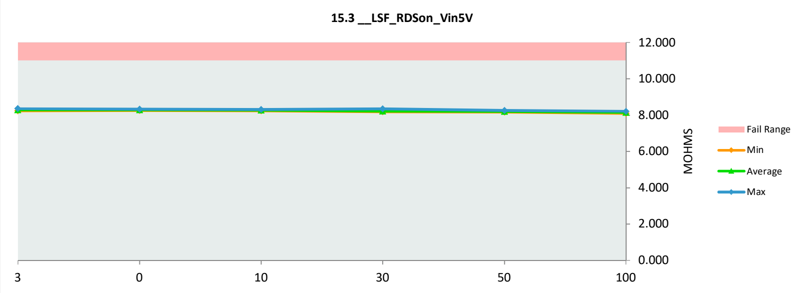
Exposure date: 11/15/2022

TPS7H4001-SHP

		15.3 __LSF_RDSon_Vin5V		
	Test Site	unkins Lab - Dalla	unkins Lab - Dallas	
	Tester	TS364 - FETS3641	TS364 - FETS36412	
	Test Number	EB588003	EB588003	
	Unit	MOHMS	MOHMS	
	Max Limit	11	11	
	Min Limit			
krad(Si)	Serial #	Pre_Unbiased	Post_unbiased	Delta
100	27	8.374	8.200	-0.174
100	28	8.252	8.095	-0.157
100	29	8.330	8.213	-0.117
100	30	8.253	8.099	-0.154
100	31	8.301	8.148	-0.153
50	41	8.316	8.203	-0.112
50	42	8.265	8.169	-0.096
50	43	8.375	8.259	-0.115
50	44	8.334	8.214	-0.120
50	45	8.361	8.171	-0.190
30	51	8.273	8.185	-0.088
30	52	8.281	8.192	-0.089
30	53	8.429	8.345	-0.084
30	54	8.283	8.187	-0.096
30	55	8.307	8.224	-0.083
10	61	8.306	8.258	-0.049
10	62	8.299	8.254	-0.045
10	63	8.339	8.278	-0.061
10	64	8.362	8.310	-0.052
10	65	8.316	8.243	-0.073
3	71	8.292	8.252	-0.040
3	72	8.252	8.248	-0.004
3	73	8.340	8.326	-0.013
3	74	8.258	8.240	-0.018
3	75	8.314	8.358	0.044
0	33	8.286	8.278	-0.009
0	34	8.319	8.333	0.013
0	35	8.254	8.257	0.003
	Max	8.429	8.358	0.044
	Average	8.310	8.234	-0.076
	Min	8.252	8.095	-0.190
	Std Dev	0.044	0.067	0.060



	15.3 __LSF_RDSon_Vin5V					
Test Site	unkins Lab - Dallas					
Tester	TS364 - FETS36412					
Test Number	EB588003					
Max Limit	11	MOHMS				
Min Limit		MOHMS				
krad(Si)	3	0	10	30	50	100
LL						
Min	8.240	8.257	8.243	8.185	8.169	8.096
Average	8.285	8.289	8.268	8.227	8.203	8.151
Max	8.358	8.333	8.310	8.345	8.259	8.213
UL	11.000	11.000	11.000	11.000	11.000	11.000



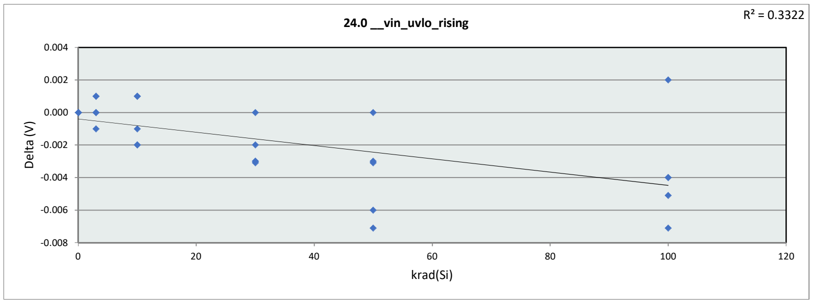
TID Unbiased HDR Report

Die lot: 1087518
Assy Lot: 2517212

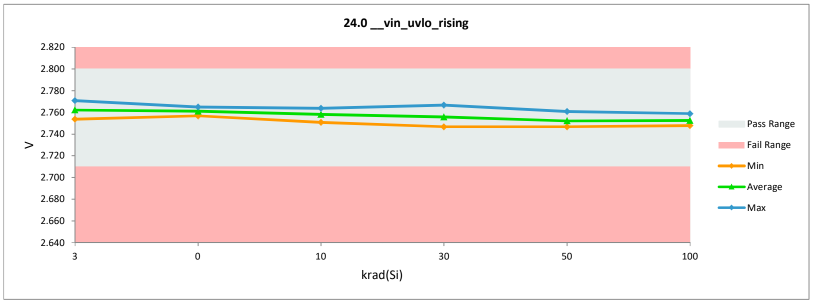
Exposure date: 11/15/2022

TPS7H4001-SHP

		24.0 __vin_uvlo_rising		
	Test Site	unkins Lab - Dalla	unkins Lab - Dallas	
	Tester	TS364 - FETS3641	TS364 - FETS36412	
	Test Number	EB588003	EB588003	
	Unit	V	V	
	Max Limit	2.8	2.8	
	Min Limit	2.71	2.71	
krad(Si)	Serial #	Pre_Unbiased	Post_unbiased	Delta
100	27	2.755	2.757	0.002
100	28	2.755	2.751	-0.004
100	29	2.753	2.748	-0.005
100	30	2.763	2.759	-0.004
100	31	2.756	2.749	-0.007
50	41	2.750	2.747	-0.003
50	42	2.755	2.748	-0.007
50	43	2.760	2.754	-0.006
50	44	2.761	2.761	0.000
50	45	2.755	2.752	-0.003
30	51	2.759	2.756	-0.003
30	52	2.754	2.751	-0.003
30	53	2.750	2.747	-0.003
30	54	2.759	2.759	0.000
30	55	2.769	2.767	-0.002
10	61	2.765	2.763	-0.002
10	62	2.757	2.758	0.001
10	63	2.753	2.751	-0.002
10	64	2.765	2.764	-0.001
10	65	2.754	2.755	0.001
3	71	2.770	2.771	0.001
3	72	2.763	2.763	0.000
3	73	2.754	2.754	0.000
3	74	2.763	2.764	0.001
3	75	2.761	2.760	-0.001
0	33	2.765	2.765	0.000
0	34	2.757	2.757	0.000
0	35	2.762	2.762	0.000
	Max	2.770	2.771	0.002
	Average	2.758	2.757	-0.002
	Min	2.750	2.747	-0.007
	Std Dev	0.005	0.007	0.003



	24.0 __vin_uvlo_rising				
Test Site	unkins Lab - Dallas				
Tester	TS364 - FETS36412				
Test Number	EB588003				
Max Limit	2.8	V			
Min Limit	2.71	V			
krad(Si)	3	0	10	30	50	100
LL	2.710	2.710	2.710	2.710	2.710	2.710
Min	2.754	2.757	2.751	2.747	2.747	2.748
Average	2.762	2.761	2.758	2.756	2.752	2.753
Max	2.771	2.765	2.764	2.767	2.761	2.759
UL	2.800	2.800	2.800	2.800	2.800	2.800



TID Unbiased HDR Report

Die lot: 1087518

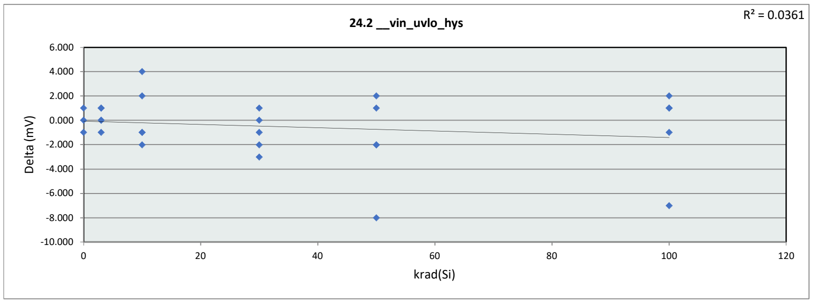
Assy Lot: 2517212

Exposure date: 11/15/2022

TPS7H4001-SHP

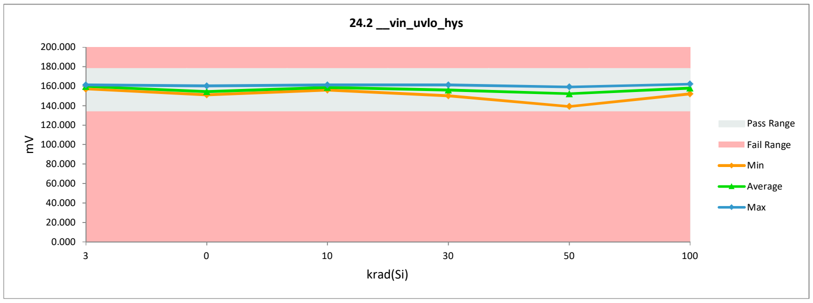
	24.2 __vin_uvlo_hys	
Test Site	unkins Lab - Dalla	unkins Lab - Dallas
Tester	TS364 - FETS3641	TS364 - FETS36412
Test Number	EB588003	EB588003
Unit	mV	mV
Max Limit	178	178
Min Limit	134	134

krad(Si)	Serial #	Pre_Unbiased	Post_unbiased	Delta
100	27	159.159	152.152	-7.007
100	28	158.158	160.160	2.002
100	29	156.156	157.157	1.001
100	30	161.161	162.162	1.001
100	31	159.159	158.158	-1.001
50	41	150.150	151.151	1.001
50	42	161.161	159.159	-2.002
50	43	147.147	139.139	-8.008
50	44	157.157	159.159	2.002
50	45	154.154	152.152	-2.002
30	51	161.161	161.161	0.000
30	52	153.153	150.150	-3.003
30	53	152.152	150.150	-2.002
30	54	161.161	160.160	-1.001
30	55	158.158	159.159	1.001
10	61	162.162	161.161	-1.001
10	62	153.153	157.157	4.004
10	63	160.160	159.159	-1.001
10	64	158.158	156.156	-2.002
10	65	157.157	159.159	2.002
3	71	161.161	161.161	0.000
3	72	161.161	161.161	0.000
3	73	160.160	161.161	1.001
3	74	156.156	157.157	1.001
3	75	159.159	158.158	-1.001
0	33	159.159	160.160	1.001
0	34	152.152	151.151	-1.001
0	35	152.152	152.152	0.000
	Max	162.162	162.162	4.004
	Average	157.193	156.656	-0.536
	Min	147.147	139.139	-8.008
	Std Dev	3.971	5.158	2.519



	24.2 __vin_uvlo_hys	
Test Site	unkins Lab - Dallas	
Tester	S364 - FETS36412	
Test Number	EB588003	
Max Limit	178	mV
Min Limit	134	mV

krad(Si)	3	0	10	30	50	100
LL	134.000	134.000	134.000	134.000	134.000	134.000
Min	157.157	151.151	156.156	150.150	139.139	152.152
Average	159.760	154.488	158.558	156.156	152.152	157.958
Max	161.161	160.160	161.161	161.161	159.159	162.162
UL	178.000	178.000	178.000	178.000	178.000	178.000



TID Unbiased HDR Report

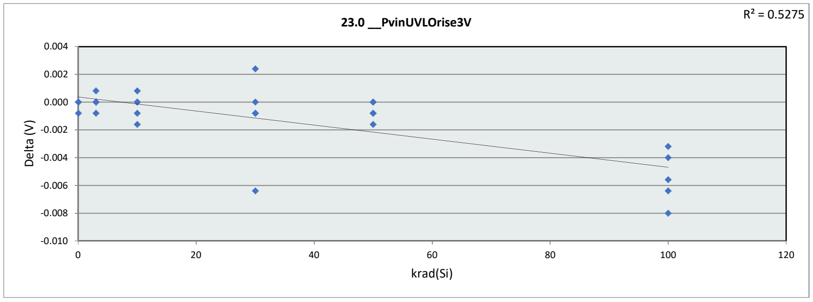
Die lot: 1087518
Assy Lot: 2517212

Exposure date: 11/15/2022

TPS7H4001-SHP

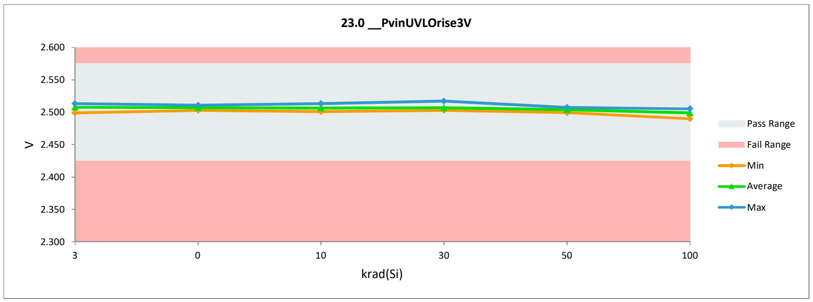
	23.0 __PvinUVLOrise3V	
Test Site	unkins Lab - Dalla	unkins Lab - Dallas
Tester	TS364 - FETS3641	TS364 - FETS36412
Test Number	EB588003	EB588003
Unit	V	V
Max Limit	2.575	2.575
Min Limit	2.425	2.425

krad(Si)	Serial #	Pre_Unbiased	Post_unbiased	Delta
100	27	2.508	2.505	-0.003
100	28	2.503	2.497	-0.006
100	29	2.498	2.490	-0.008
100	30	2.508	2.504	-0.004
100	31	2.504	2.498	-0.006
50	41	2.507	2.506	-0.001
50	42	2.500	2.500	0.000
50	43	2.509	2.508	-0.002
50	44	2.508	2.507	-0.001
50	45	2.500	2.500	0.000
30	51	2.508	2.508	-0.001
30	52	2.501	2.504	0.002
30	53	2.505	2.504	-0.001
30	54	2.503	2.503	0.000
30	55	2.524	2.517	-0.006
10	61	2.509	2.508	-0.002
10	62	2.514	2.513	-0.001
10	63	2.504	2.504	0.001
10	64	2.507	2.507	0.000
10	65	2.501	2.501	0.000
3	71	2.499	2.499	0.000
3	72	2.512	2.512	0.000
3	73	2.506	2.505	-0.001
3	74	2.510	2.510	0.000
3	75	2.512	2.513	0.001
0	33	2.512	2.511	-0.001
0	34	2.508	2.508	0.000
0	35	2.503	2.503	0.000
	Max	2.524	2.517	0.002
	Average	2.506	2.505	-0.001
	Min	2.498	2.490	-0.008
	Std Dev	0.005	0.006	0.002



	23.0 __PvinUVLOrise3V	
Test Site	unkins Lab - Dallas	
Tester	TS364 - FETS36412	
Test Number	EB588003	
Max Limit	2.575	V
Min Limit	2.425	V

krad(Si)	3	0	10	30	50	100
LL	2.425	2.425	2.425	2.425	2.425	2.425
Min	2.499	2.503	2.501	2.503	2.500	2.490
Average	2.508	2.507	2.507	2.507	2.504	2.499
Max	2.513	2.511	2.513	2.517	2.508	2.505
UL	2.575	2.575	2.575	2.575	2.575	2.575



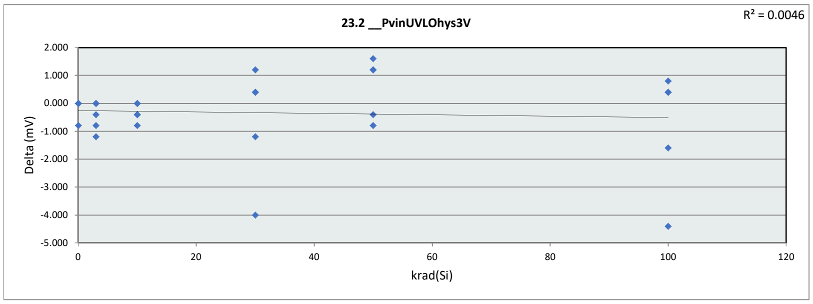
TID Unbiased HDR Report

Die lot: 1087518
Assy Lot: 2517212

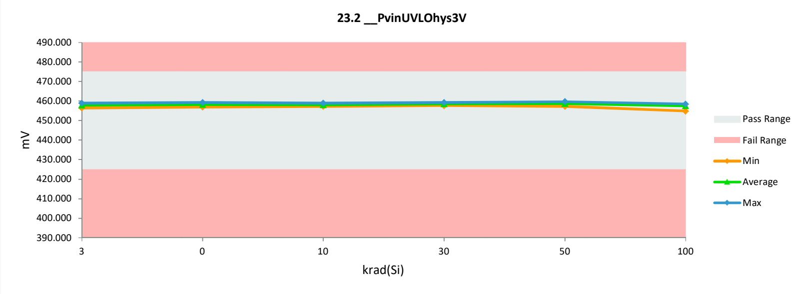
Exposure date: 11/15/2022

TPS7H4001-SHP

		23.2 __PvinUVLOhys3V		
	Test Site	unkins Lab - Dalla	unkins Lab - Dallas	
	Tester	TS364 - FETS3641	TS364 - FETS36412	
	Test Number	EB588003	EB588003	
	Unit	mV	mV	
	Max Limit	475	475	
	Min Limit	425	425	
krad(Si)	Serial #	Pre_Unbiased	Post_unbiased	Delta
100	27	457.657	458.058	0.401
100	28	458.058	458.458	0.400
100	29	459.259	454.855	-4.404
100	30	457.657	458.458	0.801
100	31	459.659	458.058	-1.601
50	41	457.257	458.859	1.602
50	42	458.459	459.660	1.201
50	43	458.458	458.058	-0.400
50	44	458.058	457.257	-0.801
50	45	458.459	459.660	1.201
30	51	457.657	458.058	0.401
30	52	458.859	457.658	-1.201
30	53	458.058	458.458	0.400
30	54	458.058	459.259	1.201
30	55	463.264	459.259	-4.005
10	61	458.458	458.058	-0.400
10	62	458.458	457.657	-0.801
10	63	457.658	457.257	-0.401
10	64	458.459	458.459	0.000
10	65	458.859	458.859	0.000
3	71	457.658	456.457	-1.201
3	72	458.459	458.459	0.000
3	73	458.859	458.058	-0.801
3	74	458.058	458.058	0.000
3	75	459.259	458.859	-0.400
0	33	459.660	458.859	-0.801
0	34	459.260	459.260	0.000
0	35	456.857	456.857	0.000
	Max	463.264	459.660	1.602
	Average	458.530	458.187	-0.343
	Min	456.857	454.855	-4.404
	Std Dev	1.159	1.023	1.347



	23.2 __PvinUVLOhys3V					
Test Site	unkins Lab - Dallas					
Tester	TS364 - FETS36412					
Test Number	EB588003					
Max Limit	475	mV				
Min Limit	425	mV				
krad(Si)	3	0	10	30	50	100
LL	425.000	425.000	425.000	425.000	425.000	425.000
Min	456.457	456.857	457.257	457.658	457.257	454.855
Average	457.978	458.325	458.058	458.538	458.699	457.577
Max	458.859	459.260	458.859	459.259	459.660	458.458
UL	475.000	475.000	475.000	475.000	475.000	475.000



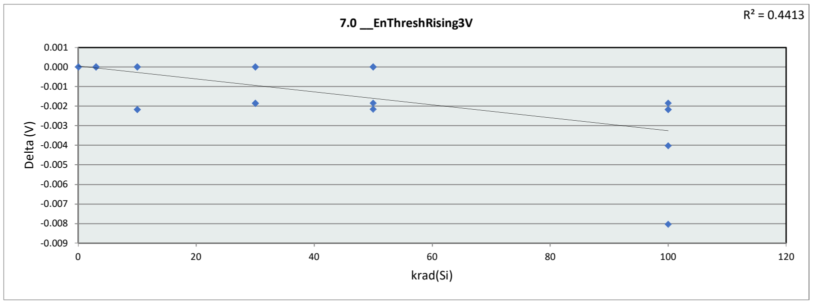
TID Unbiased HDR Report

Die lot: 1087518
Assy Lot: 2517212

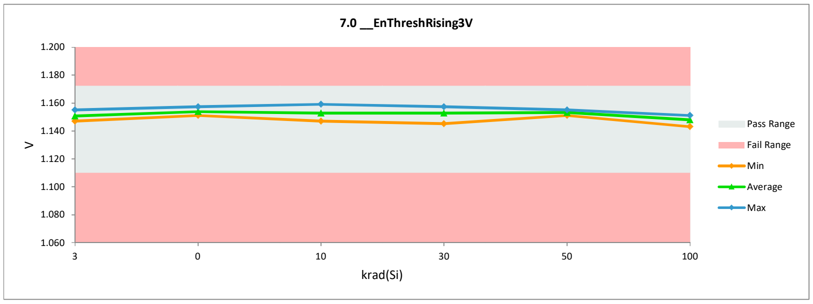
Exposure date: 11/15/2022

TPS7H4001-SHP

		7.0 __EnThreshRising3V		
	Test Site	unkins Lab - Dalla	unkins Lab - Dallas	
	Tester	TS364 - FETS3641	TS364 - FETS36412	
	Test Number	EB588003	EB588003	
	Unit	V	V	
	Max Limit	1.172	1.172	
	Min Limit	1.11	1.11	
krad(Si)	Serial #	Pre_Unbiased	Post_unbiased	Delta
100	27	1.153	1.149	-0.004
100	28	1.153	1.151	-0.002
100	29	1.151	1.143	-0.008
100	30	1.153	1.151	-0.002
100	31	1.147	1.145	-0.002
50	41	1.153	1.153	0.000
50	42	1.153	1.153	0.000
50	43	1.157	1.155	-0.002
50	44	1.155	1.153	-0.002
50	45	1.151	1.151	0.000
30	51	1.151	1.151	0.000
30	52	1.155	1.153	-0.002
30	53	1.159	1.157	-0.002
30	54	1.145	1.145	0.000
30	55	1.157	1.157	0.000
10	61	1.155	1.155	0.000
10	62	1.149	1.147	-0.002
10	63	1.153	1.151	-0.002
10	64	1.159	1.159	0.000
10	65	1.151	1.151	0.000
3	71	1.147	1.147	0.000
3	72	1.153	1.153	0.000
3	73	1.155	1.155	0.000
3	74	1.151	1.151	0.000
3	75	1.147	1.147	0.000
0	33	1.157	1.157	0.000
0	34	1.153	1.153	0.000
0	35	1.151	1.151	0.000
	Max	1.159	1.159	0.000
	Average	1.153	1.152	-0.001
	Min	1.145	1.143	-0.008
	Std Dev	0.004	0.004	0.002



	7.0 __EnThreshRising3V					
Test Site	unkins Lab - Dallas					
Tester	TS364 - FETS36412					
Test Number	EB588003					
Max Limit	1.172	V				
Min Limit	1.11	V				
krad(Si)	3	0	10	30	50	100
LL	1.110	1.110	1.110	1.110	1.110	1.110
Min	1.147	1.151	1.147	1.145	1.151	1.143
Average	1.151	1.154	1.153	1.153	1.153	1.148
Max	1.155	1.157	1.159	1.157	1.155	1.151
UL	1.172	1.172	1.172	1.172	1.172	1.172



TID Unbiased HDR Report

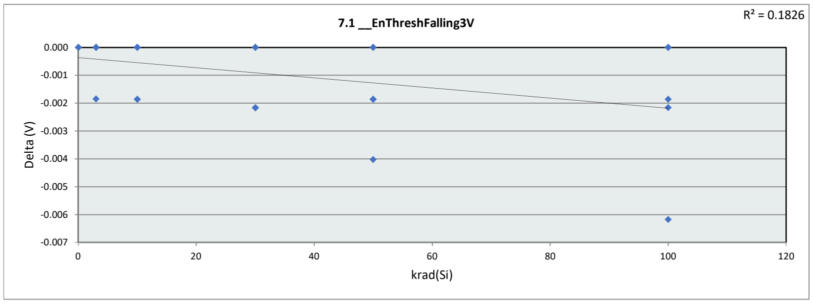
Die lot: 1087518
Assy Lot: 2517212

Exposure date: 11/15/2022

TPS7H4001-SHP

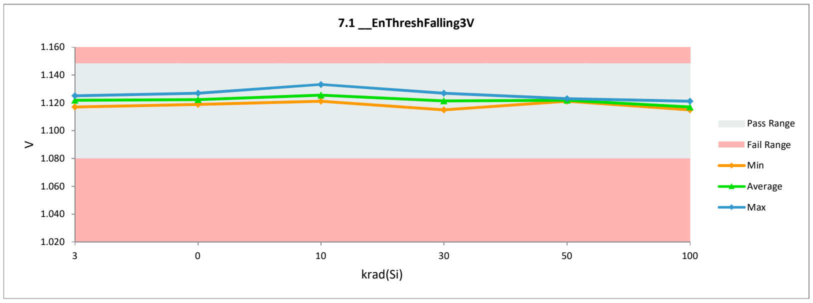
	7.1 __EnThreshFalling3V	
Test Site	unkins Lab - Dalla	unkins Lab - Dallas
Tester	TS364 - FETS3641	TS364 - FETS36412
Test Number	EB588003	EB588003
Unit	V	V
Max Limit	1.148	1.148
Min Limit	1.08	1.08

krad(Si)	Serial #	Pre_Unbiased	Post_unbiased	Delta
100	27	1.121	1.115	-0.006
100	28	1.123	1.121	-0.002
100	29	1.115	1.115	0.000
100	30	1.121	1.119	-0.002
100	31	1.115	1.115	0.000
50	41	1.123	1.123	0.000
50	42	1.123	1.121	-0.002
50	43	1.125	1.121	-0.004
50	44	1.123	1.121	-0.002
50	45	1.123	1.123	0.000
30	51	1.121	1.119	-0.002
30	52	1.123	1.123	0.000
30	53	1.127	1.127	0.000
30	54	1.117	1.115	-0.002
30	55	1.123	1.123	0.000
10	61	1.133	1.133	0.000
10	62	1.123	1.123	0.000
10	63	1.121	1.121	0.000
10	64	1.131	1.129	-0.002
10	65	1.123	1.121	-0.002
3	71	1.119	1.117	-0.002
3	72	1.121	1.121	0.000
3	73	1.123	1.123	0.000
3	74	1.125	1.125	0.000
3	75	1.123	1.123	0.000
0	33	1.127	1.127	0.000
0	34	1.121	1.121	0.000
0	35	1.119	1.119	0.000
	Max	1.133	1.133	0.000
	Average	1.123	1.122	-0.001
	Min	1.115	1.115	-0.006
	Std Dev	0.004	0.004	0.002



	7.1 __EnThreshFalling3V	
Test Site	unkins Lab - Dallas	
Tester	TS364 - FETS36412	
Test Number	EB588003	
Max Limit	1.148	V
Min Limit	1.08	V

krad(Si)	3	0	10	30	50	100
LL	1.080	1.080	1.080	1.080	1.080	1.080
Min	1.117	1.119	1.121	1.115	1.121	1.115
Average	1.122	1.122	1.126	1.121	1.122	1.117
Max	1.125	1.127	1.133	1.127	1.123	1.121
UL	1.148	1.148	1.148	1.148	1.148	1.148



TID Unbiased HDR Report

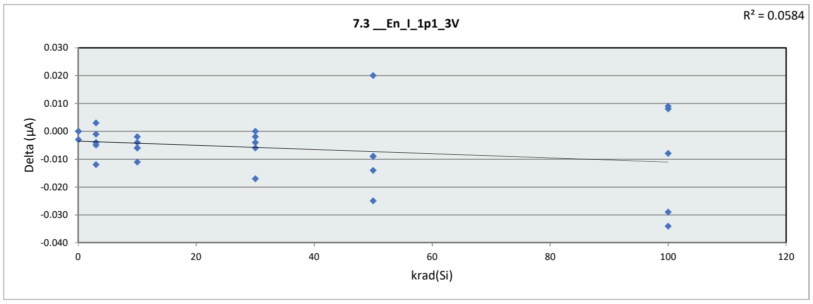
Die lot: 1087518
Assy Lot: 2517212

Exposure date: 11/15/2022

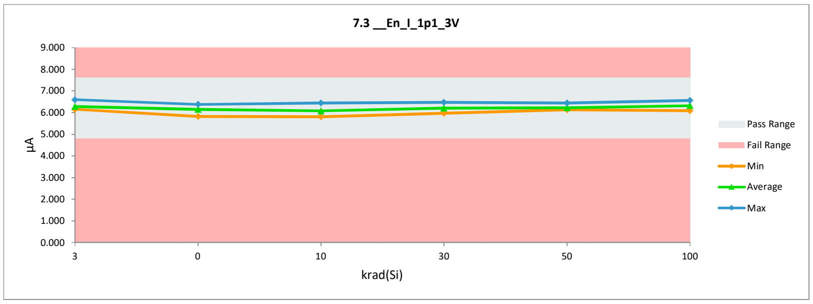
TPS7H4001-SHP

	7.3 __En_I_1p1_3V	
Test Site	unkins Lab - Dalla	unkins Lab - Dallas
Tester	TS364 - FETS3641	TS364 - FETS36412
Test Number	EB588003	EB588003
Unit	μA	μA
Max Limit	7.6	7.6
Min Limit	4.8	4.8

krad(Si)	Serial #	Pre_Unbiased	Post_unbiased	Delta
100	27	6.445	6.454	0.009
100	28	6.113	6.084	-0.029
100	29	6.557	6.565	0.008
100	30	6.275	6.241	-0.034
100	31	6.269	6.261	-0.008
50	41	6.191	6.211	0.020
50	42	6.230	6.221	-0.009
50	43	6.151	6.137	-0.014
50	44	6.447	6.438	-0.009
50	45	6.156	6.131	-0.025
30	51	6.478	6.476	-0.002
30	52	6.034	6.028	-0.006
30	53	5.977	5.973	-0.004
30	54	6.417	6.417	0.000
30	55	6.170	6.153	-0.017
10	61	6.110	6.108	-0.002
10	62	6.445	6.441	-0.004
10	63	6.051	6.045	-0.006
10	64	5.811	5.805	-0.006
10	65	6.007	5.996	-0.011
3	71	6.303	6.302	-0.001
3	72	6.155	6.150	-0.005
3	73	6.158	6.154	-0.004
3	74	6.168	6.171	0.003
3	75	6.607	6.595	-0.012
0	33	5.822	5.819	-0.003
0	34	6.381	6.381	0.000
0	35	6.232	6.232	0.000
	Max	6.607	6.595	0.020
	Average	6.220	6.214	-0.006
	Min	5.811	5.805	-0.034
	Std Dev	0.202	0.204	0.011



	7.3 __En_I_1p1_3V					
Test Site	unkins Lab - Dallas					
Tester	TS364 - FETS36412					
Test Number	EB588003					
Max Limit	7.6	μA				
Min Limit	4.8	μA				
krad(Si)	3	0	10	30	50	100
LL	4.800	4.800	4.800	4.800	4.800	4.800
Min	6.150	5.819	5.805	5.973	6.131	6.084
Average	6.274	6.144	6.079	6.209	6.228	6.321
Max	6.595	6.381	6.441	6.476	6.438	6.565
UL	7.600	7.600	7.600	7.600	7.600	7.600



TID Unbiased HDR Report

Die lot: 1087518
Assy Lot: 2517212

Exposure date: 11/15/2022

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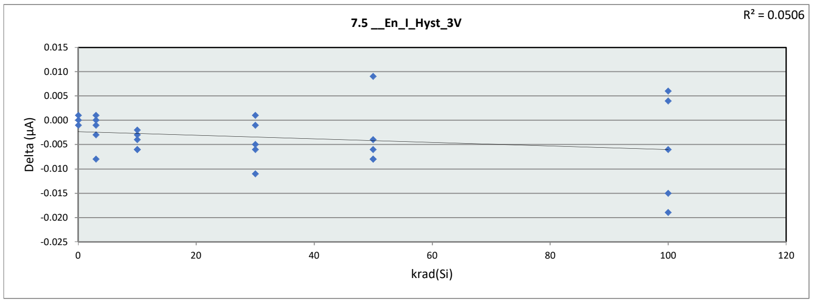
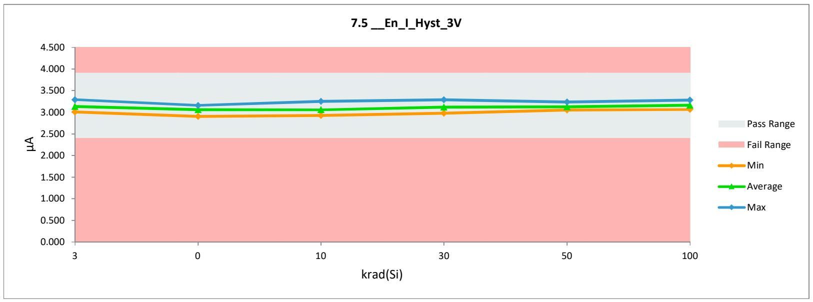
		7.5 __En_I_Hyst_3V		
	Test Site	unkins Lab - Dalla	unkins Lab - Dallas	
	Tester	TS364 - FETS3641	TS364 - FETS36412	
	Test Number	EB588003	EB588003	
	Unit	µA	µA	
	Max Limit	3.9	3.9	
	Min Limit	2.4	2.4	
krad(Si)	Serial #	Pre_Unbiased	Post_unbiased	Delta
100	27	3.153	3.157	0.004
100	28	3.084	3.065	-0.019
100	29	3.275	3.281	0.006
100	30	3.150	3.135	-0.015
100	31	3.181	3.175	-0.006
50	41	3.137	3.146	0.009
50	42	3.108	3.104	-0.004
50	43	3.093	3.085	-0.008
50	44	3.246	3.240	-0.006
50	45	3.057	3.049	-0.008
30	51	3.290	3.289	-0.001
30	52	3.004	2.999	-0.005
30	53	2.986	2.980	-0.006
30	54	3.251	3.252	0.001
30	55	3.077	3.066	-0.011
10	61	3.038	3.034	-0.004
10	62	3.255	3.253	-0.002
10	63	3.034	3.028	-0.006
10	64	2.930	2.924	-0.006
10	65	3.047	3.044	-0.003
3	71	3.189	3.189	0.000
3	72	3.010	3.009	-0.001
3	73	3.111	3.108	-0.003
3	74	3.082	3.083	0.001
3	75	3.298	3.290	-0.008
0	33	2.904	2.904	0.000
0	34	3.160	3.159	-0.001
0	35	3.106	3.107	0.001
	Max	3.298	3.290	0.009
	Average	3.116	3.113	-0.004
	Min	2.904	2.904	-0.019
	Std Dev	0.106	0.107	0.006



	7.5 __En_I_Hyst_3V					
Test Site	ınkins Lab - Dallas					
Tester	'S364 - FETS36412					
Test Number	EB588003					
Max Limit	3.9	µA				
Min Limit	2.4	µA				
krad(Si)	3	0	10	30	50	100
LL	2.400	2.400	2.400	2.400	2.400	2.400
Min	3.009	2.904	2.924	2.980	3.049	3.065
Average	3.136	3.057	3.057	3.117	3.125	3.163
Max	3.290	3.159	3.253	3.289	3.240	3.281
UL	3.900	3.900	3.900	3.900	3.900	3.900



TID Unbiased HDR Report

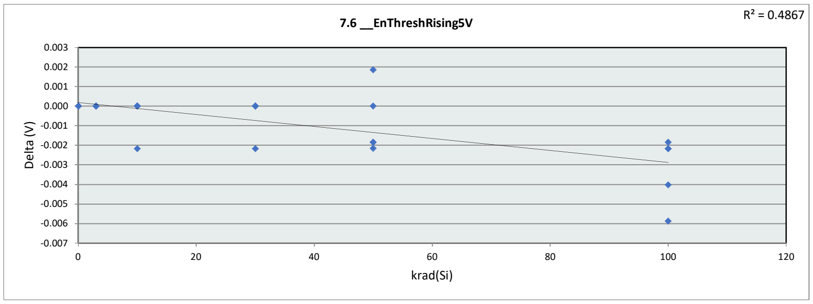
Die lot: 1087518
Assy Lot: 2517212

Exposure date: 11/15/2022

TPS7H4001-SHP

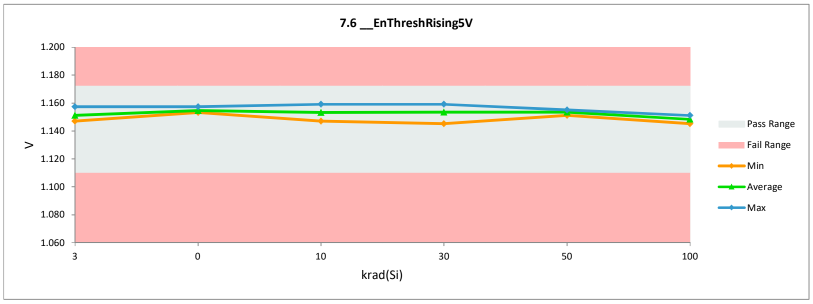
	7.6 __EnThreshRising5V	
Test Site	unkins Lab - Dalla	unkins Lab - Dallas
Tester	TS364 - FETS3641	TS364 - FETS36412
Test Number	EB588003	EB588003
Unit	V	V
Max Limit	1.172	1.172
Min Limit	1.11	1.11

krad(Si)	Serial #	Pre_Unbiased	Post_unbiased	Delta
100	27	1.153	1.149	-0.004
100	28	1.153	1.151	-0.002
100	29	1.151	1.145	-0.006
100	30	1.153	1.151	-0.002
100	31	1.147	1.145	-0.002
50	41	1.155	1.153	-0.002
50	42	1.153	1.155	0.002
50	43	1.157	1.155	-0.002
50	44	1.155	1.153	-0.002
50	45	1.151	1.151	0.000
30	51	1.153	1.151	-0.002
30	52	1.155	1.155	0.000
30	53	1.159	1.159	0.000
30	54	1.145	1.145	0.000
30	55	1.157	1.157	0.000
10	61	1.155	1.155	0.000
10	62	1.149	1.147	-0.002
10	63	1.153	1.153	0.000
10	64	1.159	1.159	0.000
10	65	1.151	1.151	0.000
3	71	1.147	1.147	0.000
3	72	1.153	1.153	0.000
3	73	1.157	1.157	0.000
3	74	1.151	1.151	0.000
3	75	1.147	1.147	0.000
0	33	1.157	1.157	0.000
0	34	1.153	1.153	0.000
0	35	1.153	1.153	0.000
	Max	1.159	1.159	0.002
	Average	1.153	1.152	-0.001
	Min	1.145	1.145	-0.006
	Std Dev	0.004	0.004	0.002



	7.6 __EnThreshRising5V	
Test Site	unkins Lab - Dallas	
Tester	S364 - FETS36412	
Test Number	EB588003	
Max Limit	1.172	V
Min Limit	1.11	V

krad(Si)	3	0	10	30	50	100
LL	1.110	1.110	1.110	1.110	1.110	1.110
Min	1.147	1.153	1.147	1.145	1.151	1.145
Average	1.151	1.155	1.153	1.154	1.154	1.148
Max	1.157	1.157	1.159	1.159	1.155	1.151
UL	1.172	1.172	1.172	1.172	1.172	1.172



TID Unbiased HDR Report

Die lot: 1087518
Assy Lot: 2517212

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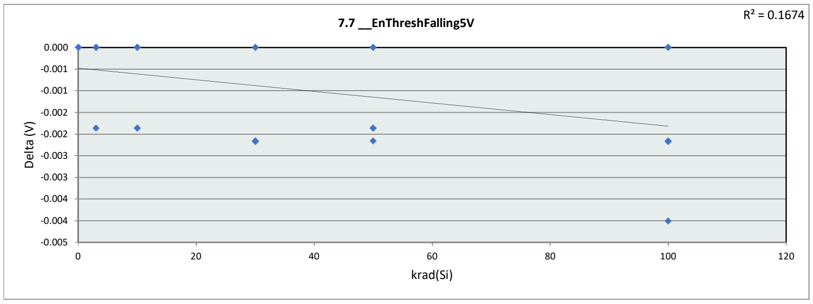
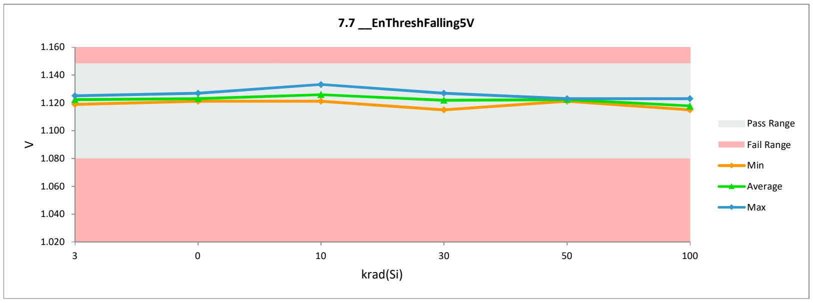
		7.7 __EnThreshFalling5V		
	Test Site	unkins Lab - Dalla	unkins Lab - Dallas	
	Tester	TS364 - FETS3641	TS364 - FETS36412	
	Test Number	EB588003	EB588003	
	Unit	V	V	
	Max Limit	1.148	1.148	
	Min Limit	1.08	1.08	
krad(Si)	Serial #	Pre_Unbiased	Post_unbiased	Delta
100	27	1.121	1.117	-0.004
100	28	1.123	1.123	0.000
100	29	1.117	1.115	-0.002
100	30	1.121	1.119	-0.002
100	31	1.115	1.115	0.000
50	41	1.123	1.123	0.000
50	42	1.123	1.121	-0.002
50	43	1.125	1.123	-0.002
50	44	1.123	1.121	-0.002
50	45	1.123	1.123	0.000
30	51	1.121	1.121	0.000
30	52	1.123	1.123	0.000
30	53	1.129	1.127	-0.002
30	54	1.117	1.115	-0.002
30	55	1.125	1.123	-0.002
10	61	1.133	1.133	0.000
10	62	1.123	1.123	0.000
10	63	1.123	1.121	-0.002
10	64	1.131	1.131	0.000
10	65	1.123	1.121	-0.002
3	71	1.119	1.119	0.000
3	72	1.123	1.121	-0.002
3	73	1.123	1.123	0.000
3	74	1.125	1.125	0.000
3	75	1.123	1.123	0.000
0	33	1.127	1.127	0.000
0	34	1.121	1.121	0.000
0	35	1.121	1.121	0.000
	Max	1.133	1.133	0.000
	Average	1.123	1.122	-0.001
	Min	1.115	1.115	-0.004
	Std Dev	0.004	0.004	0.001



	7.7 __EnThreshFalling5V					
Test Site	unkins Lab - Dallas					
Tester	TS364 - FETS36412					
Test Number	EB588003					
Max Limit	1.148	V				
Min Limit	1.08	V				
krad(Si)	3	0	10	30	50	100
LL	1.080	1.080	1.080	1.080	1.080	1.080
Min	1.119	1.121	1.121	1.115	1.121	1.115
Average	1.122	1.123	1.126	1.122	1.122	1.118
Max	1.125	1.127	1.133	1.127	1.123	1.123
UL	1.148	1.148	1.148	1.148	1.148	1.148



TID Unbiased HDR Report

Die lot: 1087518
Assy Lot: 2517212

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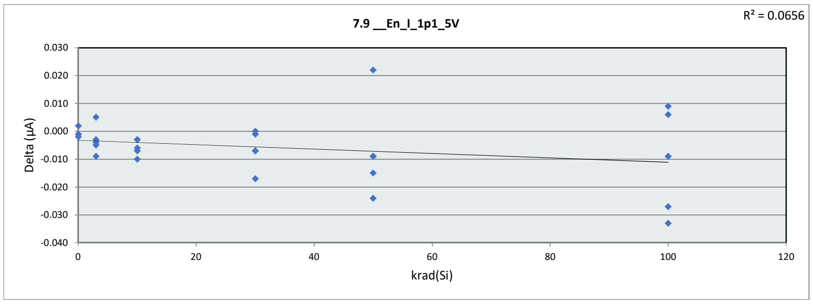
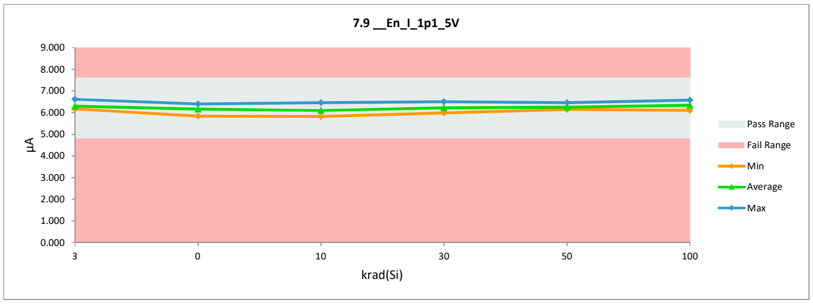
	7.9 __En_I_1p1_5V	
Test Site	unkins Lab - Dalla	unkins Lab - Dallas
Tester	TS364 - FETS3641	TS364 - FETS36412
Test Number	EB588003	EB588003
Unit	µA	µA
Max Limit	7.6	7.6
Min Limit	4.8	4.8

krad(Si)	Serial #	Pre_Unbiased	Post_unbiased	Delta
100	27	6.464	6.473	0.009
100	28	6.132	6.105	-0.027
100	29	6.577	6.583	0.006
100	30	6.293	6.260	-0.033
100	31	6.289	6.280	-0.009
50	41	6.209	6.231	0.022
50	42	6.249	6.240	-0.009
50	43	6.171	6.156	-0.015
50	44	6.467	6.458	-0.009
50	45	6.176	6.152	-0.024
30	51	6.497	6.496	-0.001
30	52	6.053	6.046	-0.007
30	53	5.997	5.990	-0.007
30	54	6.435	6.435	0.000
30	55	6.189	6.172	-0.017
10	61	6.128	6.125	-0.003
10	62	6.464	6.461	-0.003
10	63	6.071	6.064	-0.007
10	64	5.829	5.823	-0.006
10	65	6.025	6.015	-0.010
3	71	6.324	6.321	-0.003
3	72	6.174	6.169	-0.005
3	73	6.177	6.173	-0.004
3	74	6.186	6.191	0.005
3	75	6.626	6.617	-0.009
0	33	5.841	5.840	-0.001
0	34	6.401	6.399	-0.002
0	35	6.250	6.252	0.002
	Max	6.626	6.617	0.022
	Average	6.239	6.233	-0.006
	Min	5.829	5.823	-0.033
	Std Dev	0.202	0.204	0.011



	7.9 __En_I_1p1_5V	
Test Site	unkins Lab - Dallas	
Tester	S364 - FETS36412	
Test Number	EB588003	
Max Limit	7.6	µA
Min Limit	4.8	µA

krad(Si)	3	0	10	30	50	100
LL	4.800	4.800	4.800	4.800	4.800	4.800
Min	6.169	5.840	5.823	5.990	6.152	6.105
Average	6.294	6.164	6.098	6.228	6.247	6.340
Max	6.617	6.399	6.461	6.496	6.458	6.583
UL	7.600	7.600	7.600	7.600	7.600	7.600



TID Unbiased HDR Report

Die lot: 1087518
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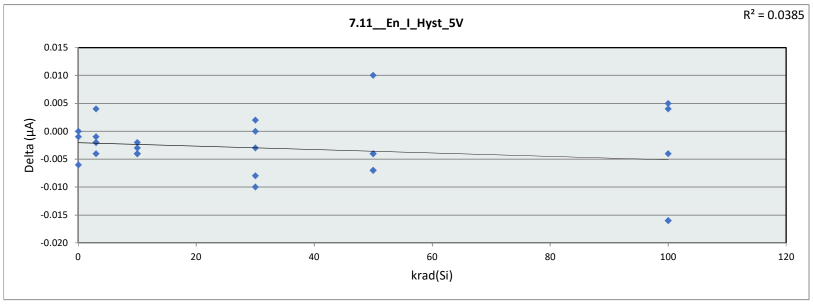
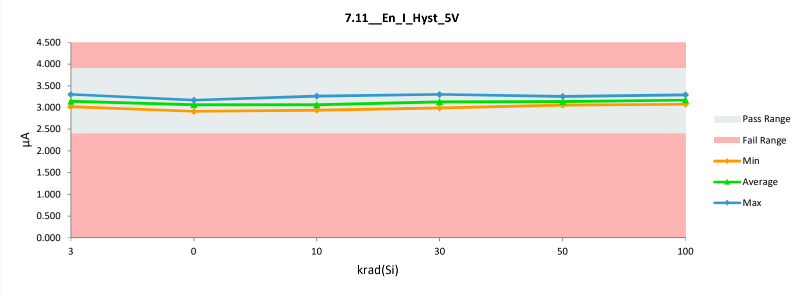
		7.11__En_I_Hyst_5V		
	Test Site	unkins Lab - Dalla	unkins Lab - Dallas	
	Tester	TS364 - FETS3641	TS364 - FETS36412	
	Test Number	EB588003	EB588003	
	Unit	µA	µA	
	Max Limit	3.9	3.9	
	Min Limit	2.4	2.4	
krad(Si)	Serial #	Pre_Unbiased	Post_unbiased	Delta
100	27	3.162	3.167	0.005
100	28	3.093	3.077	-0.016
100	29	3.285	3.289	0.004
100	30	3.160	3.144	-0.016
100	31	3.190	3.186	-0.004
50	41	3.147	3.157	0.010
50	42	3.118	3.114	-0.004
50	43	3.103	3.096	-0.007
50	44	3.256	3.252	-0.004
50	45	3.067	3.060	-0.007
30	51	3.301	3.301	0.000
30	52	3.011	3.008	-0.003
30	53	2.997	2.989	-0.008
30	54	3.261	3.263	0.002
30	55	3.086	3.076	-0.010
10	61	3.048	3.045	-0.003
10	62	3.265	3.263	-0.002
10	63	3.044	3.040	-0.004
10	64	2.939	2.935	-0.004
10	65	3.057	3.053	-0.004
3	71	3.198	3.197	-0.001
3	72	3.020	3.018	-0.002
3	73	3.120	3.118	-0.002
3	74	3.089	3.093	0.004
3	75	3.305	3.301	-0.004
0	33	2.917	2.911	-0.006
0	34	3.168	3.168	0.000
0	35	3.116	3.115	-0.001
	Max	3.305	3.301	0.010
	Average	3.126	3.123	-0.003
	Min	2.917	2.911	-0.016
	Std Dev	0.106	0.108	0.006



	7.11__En_I_Hyst_5V					
Test Site	unkins Lab - Dallas					
Tester	TS364 - FETS36412					
Test Number	EB588003					
Max Limit	3.9	µA				
Min Limit	2.4	µA				
krad(Si)	3	0	10	30	50	100
LL	2.400	2.400	2.400	2.400	2.400	2.400
Min	3.018	2.911	2.935	2.989	3.060	3.077
Average	3.145	3.065	3.067	3.127	3.136	3.173
Max	3.301	3.168	3.263	3.301	3.252	3.289
UL	3.900	3.900	3.900	3.900	3.900	3.900



TID Unbiased HDR Report

Die lot: 1087518
Assy Lot: 2517212

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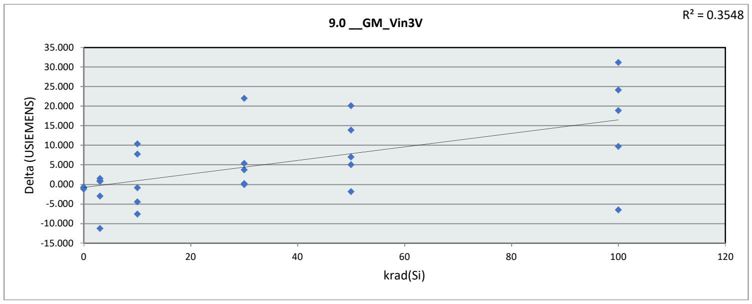
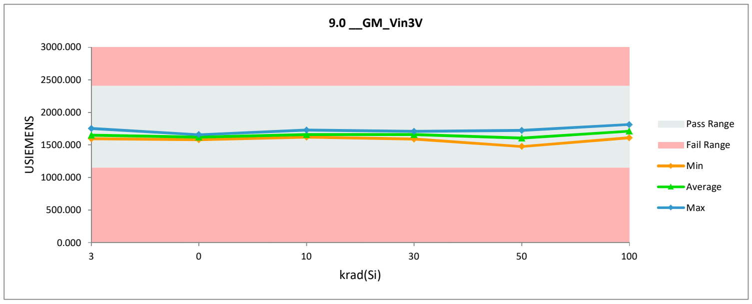
	9.0 __GM_Vin3V	
Test Site	unkins Lab - Dalla	unkins Lab - Dallas
Tester	TS364 - FETS3641	TS364 - FETS36412
Test Number	EB588003	EB588003
Unit	USIEMENS	USIEMENS
Max Limit	2400	2400
Min Limit	1150	1150

krad(Si)	Serial #	Pre_Unbiased	Post_unbiased	Delta
100	27	1676.919	1708.082	31.163
100	28	1708.705	1718.404	9.699
100	29	1819.854	1813.354	-6.500
100	30	1683.067	1707.154	24.087
100	31	1589.665	1608.574	18.909
50	41	1560.241	1567.217	6.976
50	42	1711.333	1725.194	13.861
50	43	1602.070	1622.185	20.115
50	44	1636.142	1634.305	-1.837
50	45	1471.639	1476.688	5.049
30	51	1688.209	1688.185	-0.024
30	52	1585.071	1588.781	3.710
30	53	1709.031	1709.225	0.194
30	54	1628.298	1633.657	5.359
30	55	1651.320	1673.310	21.990
10	61	1663.198	1670.978	7.780
10	62	1718.764	1729.145	10.381
10	63	1635.788	1634.923	-0.865
10	64	1627.708	1620.118	-7.590
10	65	1645.216	1640.760	-4.456
3	71	1627.219	1628.192	0.973
3	72	1644.638	1646.136	1.498
3	73	1629.248	1630.060	0.812
3	74	1600.374	1597.350	-3.024
3	75	1764.057	1752.792	-11.265
0	33	1657.889	1657.021	-0.868
0	34	1580.837	1580.105	-0.732
0	35	1619.969	1618.747	-1.222
	Max	1819.854	1813.354	31.163
	Average	1647.731	1652.880	5.149
	Min	1471.639	1476.688	-11.265
	Std Dev	66.995	66.840	10.350



	9.0 __GM_Vin3V	
Test Site	unkins Lab - Dallas	
Tester	TS364 - FETS36412	
Test Number	EB588003	
Max Limit	2400	USIEMENS
Min Limit	1150	USIEMENS

krad(Si)	3	0	10	30	50	100
LL	1150.000	1150.000	1150.000	1150.000	1150.000	1150.000
Min	1597.350	1580.105	1620.118	1588.781	1476.688	1608.574
Average	1650.906	1618.624	1659.185	1658.632	1605.118	1711.114
Max	1752.792	1657.021	1729.145	1709.225	1725.194	1813.354
UL	2400.000	2400.000	2400.000	2400.000	2400.000	2400.000



TID Unbiased HDR Report

Die lot: 1087518

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Assy Lot: 2517212

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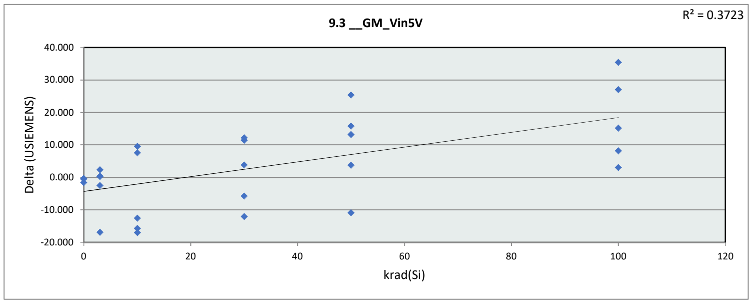
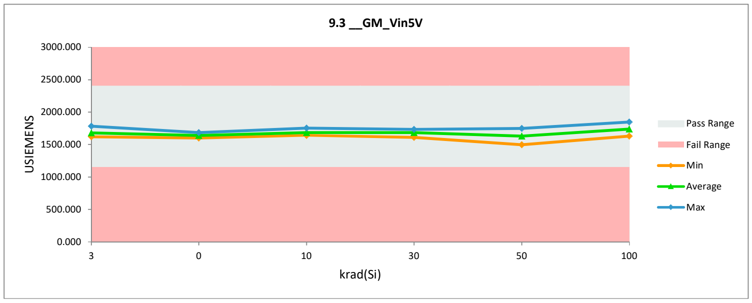
	9.3 __GM_Vin5V	
Test Site	unkins Lab - Dalla	unkins Lab - Dallas
Tester	TS364 - FETS3641	TS364 - FETS36412
Test Number	EB588003	EB588003
Unit	USIEMENS	USIEMENS
Max Limit	2400	2400
Min Limit	1150	1150

krad(Si)	Serial #	Pre_Unbiased	Post_unbiased	Delta
100	27	1705.728	1741.156	35.428
100	28	1731.290	1746.436	15.146
100	29	1844.129	1847.141	3.012
100	30	1705.116	1732.127	27.011
100	31	1621.091	1629.230	8.139
50	41	1582.903	1598.621	15.718
50	42	1733.137	1746.321	13.184
50	43	1629.778	1655.083	25.305
50	44	1668.147	1657.244	-10.903
50	45	1493.497	1497.183	3.686
30	51	1711.206	1722.617	11.411
30	52	1617.039	1611.328	-5.711
30	53	1744.461	1732.431	-12.030
30	54	1660.764	1664.576	3.812
30	55	1683.896	1696.129	12.233
10	61	1697.495	1705.083	7.588
10	62	1742.896	1752.448	9.552
10	63	1668.581	1656.059	-12.522
10	64	1659.493	1642.505	-16.988
10	65	1678.615	1662.877	-15.738
3	71	1660.997	1661.282	0.285
3	72	1677.064	1679.373	2.309
3	73	1661.546	1661.941	0.395
3	74	1622.258	1619.778	-2.480
3	75	1799.643	1782.785	-16.858
0	33	1684.192	1683.909	-0.283
0	34	1602.348	1600.728	-1.620
0	35	1642.204	1641.743	-0.461
	Max	1844.129	1847.141	35.428
	Average	1676.054	1679.576	3.522
	Min	1493.497	1497.183	-16.988
	Std Dev	67.693	68.724	13.261



	9.3 __GM_Vin5V	
Test Site	unkins Lab - Dallas	
Tester	S364 - FETS36412	
Test Number	EB588003	
Max Limit	2400	USIEMENS
Min Limit	1150	USIEMENS

krad(Si)	3	0	10	30	50	100
LL	1150.000	1150.000	1150.000	1150.000	1150.000	1150.000
Min	1619.778	1600.728	1642.505	1611.328	1497.183	1629.230
Average	1681.032	1642.127	1683.794	1685.416	1630.890	1739.218
Max	1782.785	1683.909	1752.448	1732.431	1746.321	1847.141
UL	2400.000	2400.000	2400.000	2400.000	2400.000	2400.000



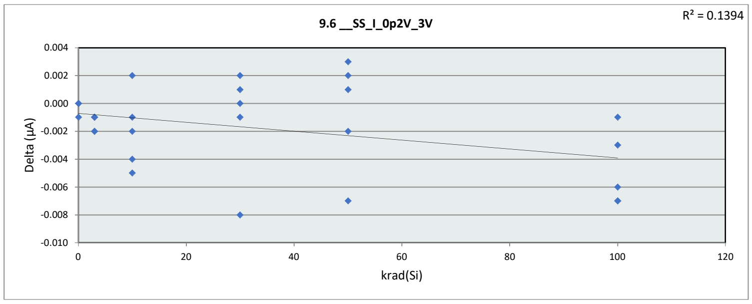
TID Unbiased HDR Report

Die lot: 1087518
Assy Lot: 2517212

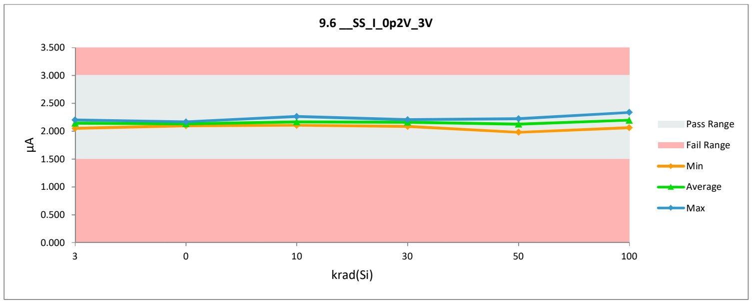
Exposure date: 11/15/2022

TPS7H4001-SHP

		9.6 __SS_I_0p2V_3V		
	Test Site	unkins Lab - Dalla	unkins Lab - Dallas	
	Tester	TS364 - FETS3641	TS364 - FETS36412	
	Test Number	EB588003	EB588003	
	Unit	µA	µA	
	Max Limit	3	3	
	Min Limit	1.5	1.5	
krad(Si)	Serial #	Pre_Unbiased	Post_unbiased	Delta
100	27	2.216	2.210	-0.006
100	28	2.261	2.258	-0.003
100	29	2.339	2.338	-0.001
100	30	2.071	2.064	-0.007
100	31	2.120	2.113	-0.007
50	41	2.143	2.144	0.001
50	42	2.228	2.226	-0.002
50	43	2.164	2.167	0.003
50	44	2.115	2.117	0.002
50	45	1.987	1.980	-0.007
30	51	2.184	2.184	0.000
30	52	2.144	2.145	0.001
30	53	2.207	2.206	-0.001
30	54	2.085	2.087	0.002
30	55	2.176	2.168	-0.008
10	61	2.148	2.150	0.002
10	62	2.267	2.263	-0.004
10	63	2.107	2.105	-0.002
10	64	2.155	2.154	-0.001
10	65	2.157	2.152	-0.005
3	71	2.203	2.201	-0.002
3	72	2.173	2.172	-0.001
3	73	2.054	2.052	-0.002
3	74	2.108	2.107	-0.001
3	75	2.185	2.184	-0.001
0	33	2.169	2.168	-0.001
0	34	2.097	2.097	0.000
0	35	2.126	2.126	0.000
	Max	2.339	2.338	0.003
	Average	2.157	2.155	-0.002
	Min	1.987	1.980	-0.008
	Std Dev	0.071	0.071	0.003



	9.6 __SS_I_0p2V_3V					
Test Site	unkins Lab - Dallas					
Tester	'S364 - FETS36412					
Test Number	EB588003					
Max Limit	3	µA				
Min Limit	1.5	µA				
krad(Si)	3	0	10	30	50	100
LL	1.500	1.500	1.500	1.500	1.500	1.500
Min	2.052	2.097	2.105	2.087	1.980	2.064
Average	2.143	2.130	2.165	2.158	2.127	2.197
Max	2.201	2.168	2.263	2.206	2.226	2.338
UL	3.000	3.000	3.000	3.000	3.000	3.000



TID Unbiased HDR Report

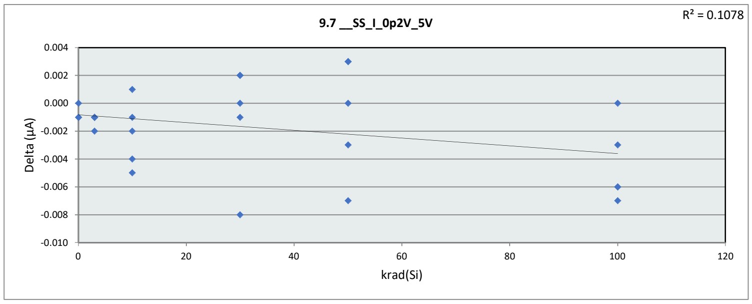
Die lot: 1087518
Assy Lot: 2517212

Exposure date: 11/15/2022

TPS7H4001-SHP

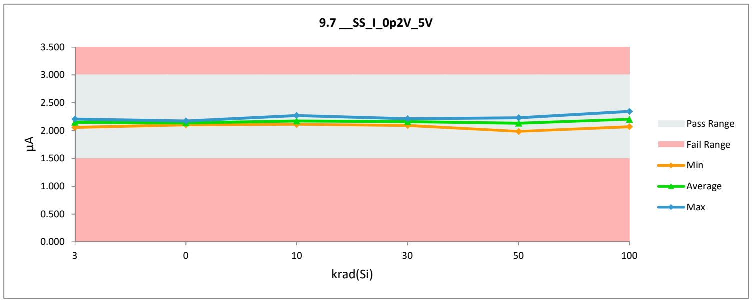
	9.7 __SS_I_0p2V_5V		
Test Site	unkins Lab - Dalla	unkins Lab - Dallas	
Tester	TS364 - FETS3641	TS364 - FETS36412	
Test Number	EB588003	EB588003	
Unit	µA	µA	
Max Limit	3	3	
Min Limit	1.5	1.5	

krad(Si)	Serial #	Pre_Unbiased	Post_unbiased	Delta
100	27	2.221	2.215	-0.006
100	28	2.267	2.264	-0.003
100	29	2.344	2.344	0.000
100	30	2.076	2.069	-0.007
100	31	2.125	2.119	-0.006
50	41	2.149	2.149	0.000
50	42	2.234	2.231	-0.003
50	43	2.169	2.172	0.003
50	44	2.120	2.123	0.003
50	45	1.992	1.985	-0.007
30	51	2.189	2.189	0.000
30	52	2.149	2.151	0.002
30	53	2.213	2.212	-0.001
30	54	2.090	2.092	0.002
30	55	2.181	2.173	-0.008
10	61	2.154	2.155	0.001
10	62	2.273	2.269	-0.004
10	63	2.112	2.110	-0.002
10	64	2.161	2.160	-0.001
10	65	2.162	2.157	-0.005
3	71	2.208	2.207	-0.001
3	72	2.178	2.177	-0.001
3	73	2.059	2.057	-0.002
3	74	2.114	2.113	-0.001
3	75	2.191	2.190	-0.001
0	33	2.174	2.173	-0.001
0	34	2.103	2.102	-0.001
0	35	2.131	2.131	0.000
	Max	2.344	2.344	0.003
	Average	2.162	2.160	-0.002
	Min	1.992	1.985	-0.008
	Std Dev	0.071	0.072	0.003



	9.7 __SS_I_0p2V_5V	
Test Site	unkins Lab - Dallas	
Tester	TS364 - FETS36412	
Test Number	EB588003	
Max Limit	3	µA
Min Limit	1.5	µA

krad(Si)	3	0	10	30	50	100
LL	1.500	1.500	1.500	1.500	1.500	1.500
Min	2.057	2.102	2.110	2.092	1.985	2.069
Average	2.149	2.135	2.170	2.163	2.132	2.202
Max	2.207	2.173	2.269	2.212	2.231	2.344
UL	3.000	3.000	3.000	3.000	3.000	3.000



TID Unbiased HDR Report

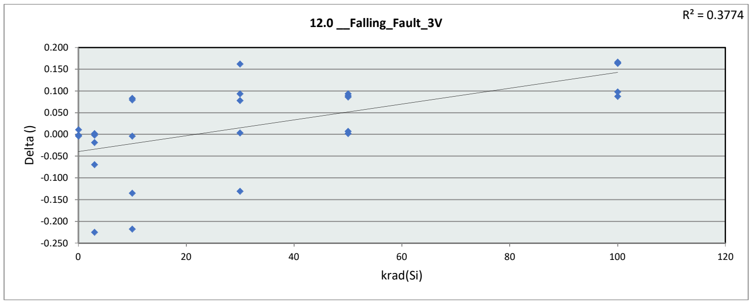
Die lot: 1087518

Assy Lot: 2517212

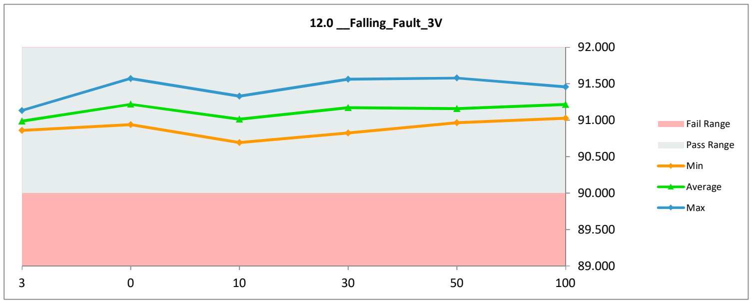
Exposure date: 11/15/2022

TPS7H4001-SHP

		12.0 __Falling_Fault_3V		
	Test Site	unkins Lab - Dalla	unkins Lab - Dallas	
	Tester	TS364 - FETS3641	TS364 - FETS36412	
	Test Number	EB588003	EB588003	
	Unit			
	Max Limit			
	Min Limit	90	90	
krad(Si)	Serial #	Pre_Unbiased	Post_unbiased	Delta
100	27	90.940	91.027	0.087
100	28	90.905	91.069	0.164
100	29	91.017	91.180	0.163
100	30	91.362	91.460	0.098
100	31	91.190	91.356	0.166
50	41	90.875	90.968	0.093
50	42	91.103	91.105	0.002
50	43	90.942	91.031	0.089
50	44	91.494	91.580	0.086
50	45	91.103	91.110	0.007
30	51	91.130	91.208	0.078
30	52	91.044	90.913	-0.131
30	53	91.186	91.348	0.162
30	54	90.824	90.827	0.003
30	55	91.469	91.562	0.093
10	61	91.247	91.029	-0.218
10	62	90.907	90.903	-0.004
10	63	90.829	90.694	-0.135
10	64	91.249	91.332	0.083
10	65	91.033	91.112	0.079
3	71	91.027	91.029	0.002
3	72	91.086	90.861	-0.225
3	73	90.981	90.962	-0.019
3	74	91.135	91.133	-0.002
3	75	91.023	90.953	-0.070
0	33	90.940	90.938	-0.002
0	34	91.140	91.151	0.011
0	35	91.575	91.571	-0.004
	Max	91.575	91.580	0.166
	Average	91.098	91.122	0.023
	Min	90.824	90.694	-0.225
	Std Dev	0.196	0.233	0.105



	12.0 __Falling_Fault_3V					
Test Site	unkins Lab - Dallas					
Tester	S364 - FETS36412					
Test Number	EB588003					
Max Limit						
Min Limit	90					
krad(Si)	3	0	10	30	50	100
LL	90.000	90.000	90.000	90.000	90.000	90.000
Min	90.861	90.938	90.694	90.827	90.968	91.027
Average	90.988	91.220	91.014	91.172	91.159	91.218
Max	91.133	91.571	91.332	91.562	91.580	91.460
UL						



TID Unbiased HDR Report

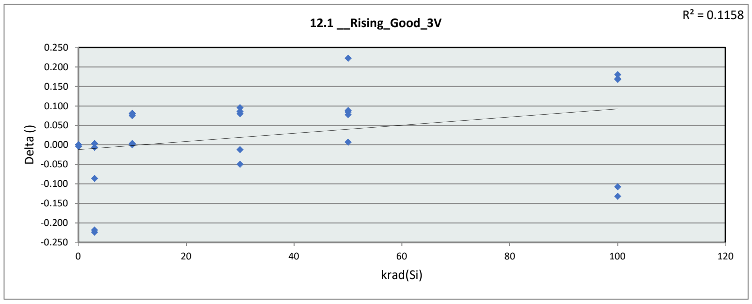
Die lot: 1087518
Assy Lot: 2517212

Exposure date: 11/15/2022

TPS7H4001-SHP

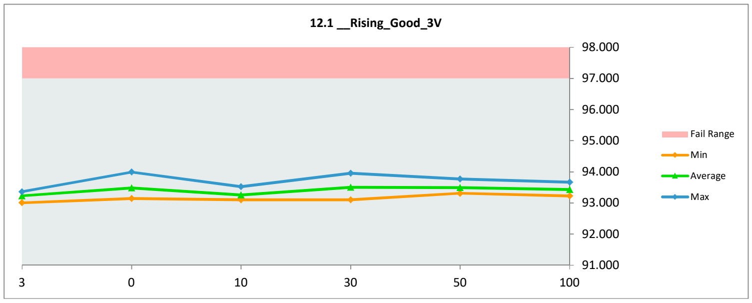
	12.1 __Rising_Good_3V	
Test Site	unkins Lab - Dalla	unkins Lab - Dallas
Tester	TS364 - FETS3641	TS364 - FETS36412
Test Number	EB588003	EB588003
Unit		
Max Limit	97	97
Min Limit		

krad(Si)	Serial #	Pre_Unbiased	Post_unbiased	Delta
100	27	93.358	93.226	-0.132
100	28	93.108	93.278	0.170
100	29	93.223	93.391	0.168
100	30	93.780	93.673	-0.107
100	31	93.387	93.567	0.180
50	41	93.309	93.393	0.084
50	42	93.302	93.524	0.222
50	43	93.358	93.446	0.088
50	44	93.696	93.774	0.078
50	45	93.304	93.311	0.007
30	51	93.555	93.651	0.096
30	52	93.028	93.108	0.080
30	53	93.611	93.561	-0.050
30	54	93.255	93.243	-0.012
30	55	93.874	93.960	0.086
10	61	93.222	93.222	0.000
10	62	93.108	93.112	0.004
10	63	93.030	93.105	0.075
10	64	93.448	93.529	0.081
10	65	93.224	93.304	0.080
3	71	93.230	93.006	-0.224
3	72	93.281	93.275	-0.006
3	73	93.389	93.171	-0.218
3	74	93.336	93.340	0.004
3	75	93.448	93.362	-0.086
0	33	93.142	93.142	0.000
0	34	93.324	93.320	-0.004
0	35	93.995	93.995	0.000
	Max	93.995	93.995	0.222
	Average	93.369	93.392	0.024
	Min	93.028	93.006	-0.224
	Std Dev	0.241	0.251	0.109


12.1 __Rising_Good_3V

	12.1 __Rising_Good_3V
Test Site	unkins Lab - Dallas
Tester	TS364 - FETS36412
Test Number	EB588003
Max Limit	97
Min Limit	

krad(Si)	3	0	10	30	50	100
LL						
Min	93.006	93.142	93.105	93.108	93.311	93.226
Average	93.231	93.486	93.254	93.505	93.490	93.427
Max	93.362	93.995	93.529	93.960	93.774	93.673
UL	97.000	97.000	97.000	97.000	97.000	97.000


12.1 __Rising_Good_3V

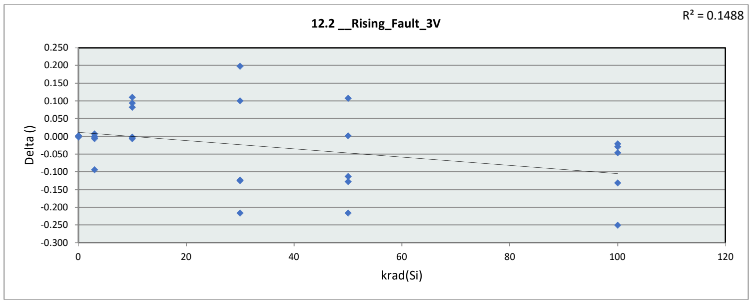
TID Unbiased HDR Report

Die lot: 1087518
Assy Lot: 2517212

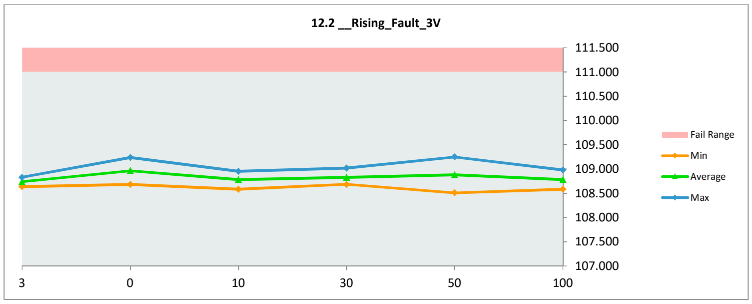
Exposure date: 11/15/2022

TPS7H4001-SHP

		12.2 __Rising_Fault_3V		
	Test Site	unkins Lab - Dalla	unkins Lab - Dallas	
	Tester	TS364 - FETS3641	TS364 - FETS36412	
	Test Number	EB588003	EB588003	
	Unit			
	Max Limit	111	111	
	Min Limit			
krad(Si)	Serial #	Pre_Unbiased	Post_unbiased	Delta
100	27	108.979	108.848	-0.131
100	28	108.807	108.778	-0.029
100	29	108.974	108.723	-0.251
100	30	109.026	108.980	-0.046
100	31	108.602	108.581	-0.021
50	41	109.165	109.052	-0.113
50	42	108.725	108.509	-0.216
50	43	108.758	108.630	-0.128
50	44	109.141	109.248	0.107
50	45	108.951	108.953	0.002
30	51	108.584	108.684	0.100
30	52	109.145	109.020	-0.125
30	53	108.824	109.022	0.198
30	54	108.918	108.702	-0.216
30	55	108.846	108.723	-0.123
10	61	108.633	108.631	-0.002
10	62	108.588	108.581	-0.007
10	63	108.707	108.801	0.094
10	64	108.846	108.956	0.110
10	65	108.863	108.945	0.082
3	71	108.626	108.633	0.007
3	72	108.668	108.661	-0.007
3	73	108.832	108.830	-0.002
3	74	108.805	108.805	0.000
3	75	108.850	108.756	-0.094
0	33	108.972	108.974	0.002
0	34	108.682	108.680	-0.002
0	35	109.237	109.239	0.002
	Max	109.237	109.248	0.198
	Average	108.848	108.819	-0.029
	Min	108.584	108.509	-0.251
	Std Dev	0.185	0.194	0.107



	12.2 __Rising_Fault_3V					
Test Site	unkins Lab - Dallas					
Tester	TS364 - FETS36412					
Test Number	EB588003					
Max Limit	111					
Min Limit						
krad(Si)	3	0	10	30	50	100
LL						
Min	108.633	108.680	108.581	108.684	108.509	108.581
Average	108.737	108.964	108.783	108.830	108.878	108.782
Max	108.830	109.239	108.956	109.022	109.248	108.980
UL	111.000	111.000	111.000	111.000	111.000	111.000



TID Unbiased HDR Report

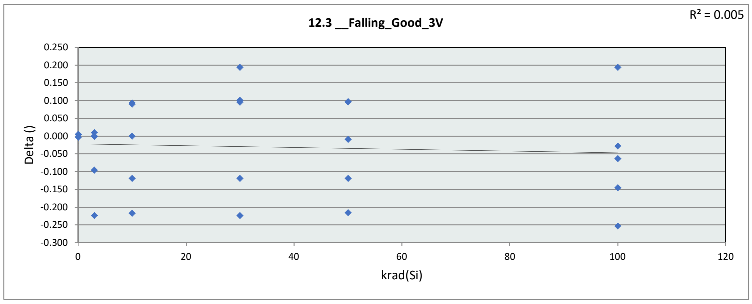
Die lot: 1087518
Assy Lot: 2517212

Exposure date: 11/15/2022

TPS7H4001-SHP

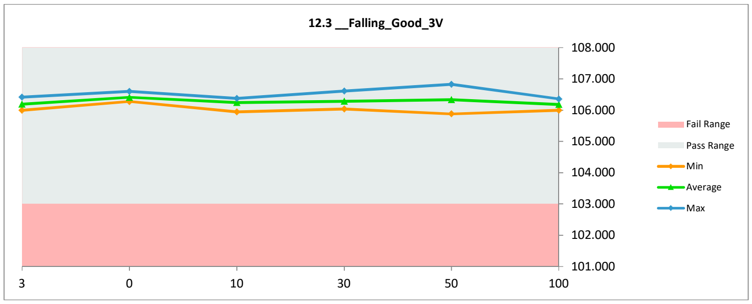
	12.3 __Falling_Good_3V	
Test Site	unkins Lab - Dalla	unkins Lab - Dallas
Tester	TS364 - FETS3641	TS364 - FETS36412
Test Number	EB588003	EB588003
Unit		
Max Limit		
Min Limit	103	103

krad(Si)	Serial #	Pre_Unbiased	Post_unbiased	Delta
100	27	106.140	105.995	-0.145
100	28	106.164	106.357	0.193
100	29	106.318	106.065	-0.253
100	30	106.383	106.320	-0.063
100	31	106.196	106.168	-0.028
50	41	106.537	106.418	-0.119
50	42	106.097	105.881	-0.216
50	43	106.129	106.226	0.097
50	44	106.730	106.826	0.096
50	45	106.326	106.317	-0.009
30	51	105.938	106.033	0.095
30	52	106.732	106.613	-0.119
30	53	106.198	106.391	0.193
30	54	106.291	106.067	-0.224
30	55	106.222	106.323	0.101
10	61	106.235	106.235	0.000
10	62	106.164	105.947	-0.217
10	63	106.288	106.381	0.093
10	64	106.231	106.321	0.090
10	65	106.440	106.321	-0.119
3	71	106.224	106.000	-0.224
3	72	106.028	106.038	0.010
3	73	106.420	106.420	0.000
3	74	106.162	106.162	0.000
3	75	106.446	106.350	-0.096
0	33	106.345	106.350	0.005
0	34	106.279	106.276	-0.003
0	35	106.600	106.604	0.004
	Max	106.732	106.826	0.193
	Average	106.295	106.264	-0.031
	Min	105.938	105.881	-0.253
	Std Dev	0.191	0.216	0.127



	12.3 __Falling_Good_3V
Test Site	unkins Lab - Dallas
Tester	TS364 - FETS36412
Test Number	EB588003
Max Limit	
Min Limit	103

krad(Si)	3	0	10	30	50	100
LL	103.000	103.000	103.000	103.000	103.000	103.000
Min	106.000	106.276	105.947	106.033	105.881	105.995
Average	106.194	106.410	106.241	106.285	106.334	106.181
Max	106.420	106.604	106.381	106.613	106.826	106.357
UL						



TID Unbiased HDR Report

Die lot: 1087518

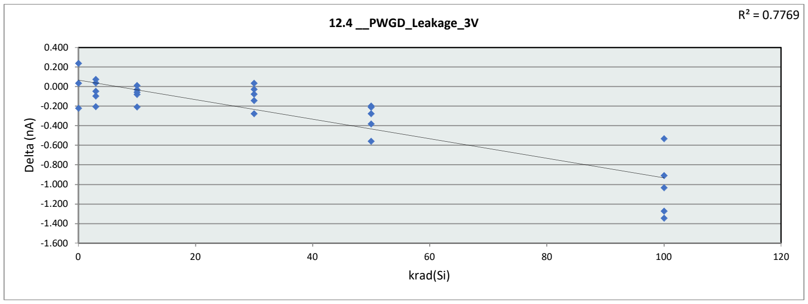
Assy Lot: 2517212

Exposure date: 11/15/2022

TPS7H4001-SHP

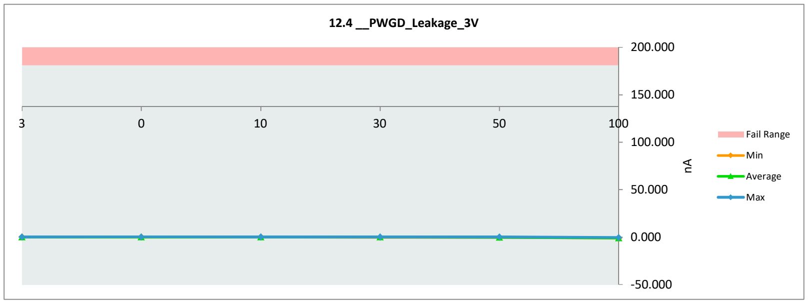
	12.4 __PWGD_Leakage_3V	
Test Site	unkins Lab - Dalla	unkins Lab - Dallas
Tester	TS364 - FETS3641	TS364 - FETS36412
Test Number	EB588003	EB588003
Unit	nA	nA
Max Limit	181	181
Min Limit		

krad(Si)	Serial #	Pre_Unbiased	Post_unbiased	Delta
100	27	0.173	-0.360	-0.533
100	28	0.278	-0.632	-0.910
100	29	0.273	-0.999	-1.272
100	30	0.064	-0.971	-1.035
100	31	0.305	-1.041	-1.346
50	41	0.351	0.072	-0.279
50	42	0.321	-0.238	-0.559
50	43	0.240	0.040	-0.200
50	44	0.308	0.097	-0.211
50	45	0.288	-0.096	-0.384
30	51	0.101	0.136	0.035
30	52	0.230	0.200	-0.030
30	53	0.299	0.220	-0.079
30	54	0.236	0.092	-0.144
30	55	0.278	-0.001	-0.279
10	61	0.335	0.254	-0.081
10	62	0.173	0.141	-0.032
10	63	0.247	0.039	-0.208
10	64	0.142	0.084	-0.058
10	65	0.071	0.083	0.012
3	71	0.054	0.127	0.073
3	72	0.198	0.151	-0.047
3	73	0.236	0.272	0.036
3	74	0.316	0.220	-0.096
3	75	0.325	0.120	-0.205
0	33	0.324	0.103	-0.221
0	34	0.088	0.326	0.238
0	35	0.076	0.111	0.035
	Max	0.351	0.326	0.238
	Average	0.226	-0.052	-0.278
	Min	0.054	-1.041	-1.346
	Std Dev	0.095	0.389	0.404



	12.4 __PWGD_Leakage_3V	
Test Site	unkins Lab - Dallas	
Tester	TS364 - FETS36412	
Test Number	EB588003	
Max Limit	181	nA
Min Limit		nA

krad(Si)	3	0	10	30	50	100
LL						
Min	0.120	0.103	0.039	-0.001	-0.238	-1.041
Average	0.178	0.180	0.120	0.129	-0.025	-0.801
Max	0.272	0.326	0.254	0.220	0.097	-0.360
UL	181.000	181.000	181.000	181.000	181.000	181.000



TID Unbiased HDR Report

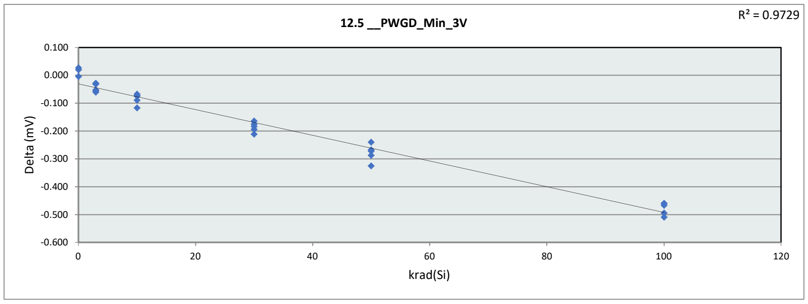
Die lot: 1087518
Assy Lot: 2517212

Exposure date: 11/15/2022

TPS7H4001-SHP

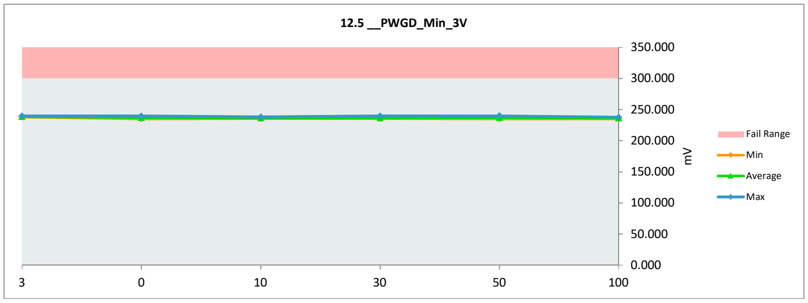
	12.5 __PWGD_Min_3V	
Test Site	unkins Lab - Dalla	unkins Lab - Dallas
Tester	TS364 - FETS3641	TS364 - FETS36412
Test Number	EB588003	EB588003
Unit	mV	mV
Max Limit	300	300
Min Limit		

krad(Si)	Serial #	Pre_Unbiased	Post_unbiased	Delta
100	27	238.098	237.631	-0.467
100	28	237.388	236.894	-0.494
100	29	235.868	235.358	-0.510
100	30	238.453	237.993	-0.460
100	31	236.941	236.481	-0.460
50	41	240.349	240.109	-0.240
50	42	235.436	235.168	-0.268
50	43	236.087	235.762	-0.325
50	44	239.997	239.710	-0.287
50	45	235.771	235.499	-0.272
30	51	236.348	236.172	-0.176
30	52	239.761	239.567	-0.194
30	53	235.722	235.538	-0.184
30	54	235.664	235.453	-0.211
30	55	237.143	236.979	-0.164
10	61	236.788	236.720	-0.068
10	62	236.741	236.668	-0.073
10	63	236.015	235.898	-0.117
10	64	237.526	237.451	-0.075
10	65	238.115	238.025	-0.090
3	71	238.103	238.071	-0.032
3	72	238.918	238.889	-0.029
3	73	238.460	238.404	-0.056
3	74	239.851	239.790	-0.061
3	75	238.309	238.256	-0.053
0	33	239.649	239.676	0.027
0	34	235.078	235.098	0.020
0	35	237.233	237.228	-0.005
	Max	240.349	240.109	0.027
	Average	237.493	237.303	-0.190
	Min	235.078	235.098	-0.510
	Std Dev	1.547	1.579	0.166



	12.5 __PWGD_Min_3V	
Test Site	unkins Lab - Dallas	
Tester	S364 - FETS36412	
Test Number	EB588003	
Max Limit	300	mV
Min Limit		mV

krad(Si)	3	0	10	30	50	100
LL						
Min	238.071	235.098	235.898	235.453	235.168	235.358
Average	238.682	237.334	236.952	236.742	237.250	236.871
Max	239.790	239.676	238.025	239.567	240.109	237.993
UL	300.000	300.000	300.000	300.000	300.000	300.000



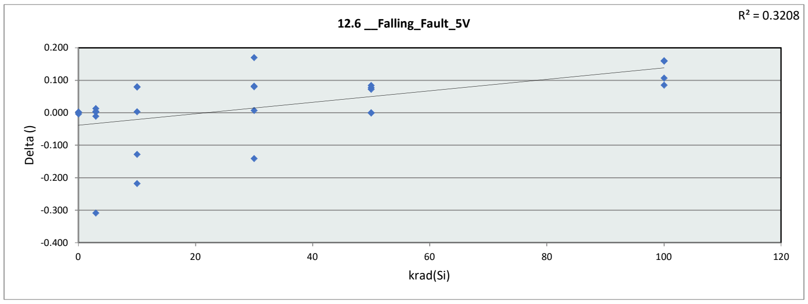
TID Unbiased HDR Report

Die lot: 1087518
Assy Lot: 2517212

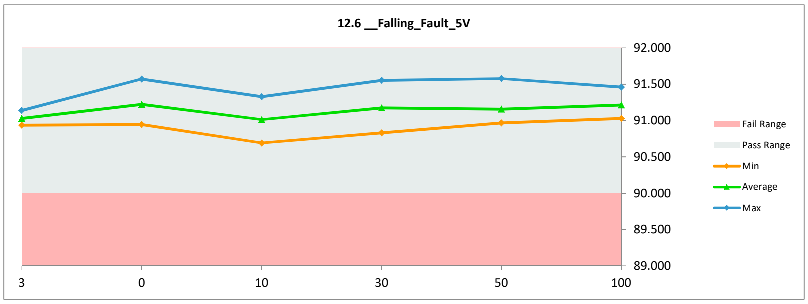
Exposure date: 11/15/2022

TPS7H4001-SHP

		12.6 __Falling_Fault_5V		
	Test Site	unkins Lab - Dalla	unkins Lab - Dallas	
	Tester	TS364 - FETS3641	TS364 - FETS36412	
	Test Number	EB588003	EB588003	
	Unit			
	Max Limit			
	Min Limit	90	90	
krad(Si)	Serial #	Pre_Unbiased	Post_unbiased	Delta
100	27	90.944	91.029	0.085
100	28	90.903	91.063	0.160
100	29	91.017	91.176	0.159
100	30	91.354	91.460	0.106
100	31	91.190	91.350	0.160
50	41	90.894	90.966	0.072
50	42	91.107	91.107	0.000
50	43	90.946	91.023	0.077
50	44	91.494	91.578	0.084
50	45	91.108	91.107	-0.001
30	51	91.133	91.215	0.082
30	52	91.048	90.907	-0.141
30	53	91.188	91.358	0.170
30	54	90.822	90.829	0.007
30	55	91.472	91.552	0.080
10	61	91.252	91.034	-0.218
10	62	90.898	90.901	0.003
10	63	90.820	90.692	-0.128
10	64	91.247	91.327	0.080
10	65	91.029	91.108	0.079
3	71	91.029	91.031	0.002
3	72	91.082	91.086	0.004
3	73	90.972	90.961	-0.011
3	74	91.126	91.139	0.013
3	75	91.247	90.938	-0.309
0	33	90.944	90.946	0.002
0	34	91.146	91.148	0.002
0	35	91.577	91.573	-0.004
	Max	91.577	91.578	0.170
	Average	91.107	91.129	0.022
	Min	90.820	90.692	-0.309
	Std Dev	0.198	0.227	0.111



	12.6 __Falling_Fault_5V					
Test Site	unkins Lab - Dallas					
Tester	TS364 - FETS36412					
Test Number	EB588003					
Max Limit						
Min Limit	90					
krad(Si)	3	0	10	30	50	100
LL	90.000	90.000	90.000	90.000	90.000	90.000
Min	90.938	90.946	90.692	90.829	90.966	91.029
Average	91.031	91.222	91.012	91.172	91.156	91.216
Max	91.139	91.573	91.327	91.552	91.578	91.460
UL						



TID Unbiased HDR Report

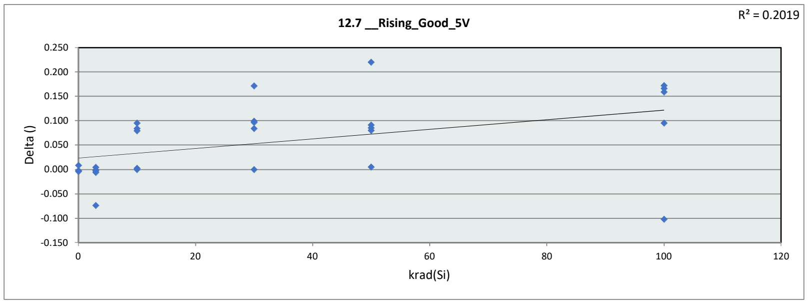
Die lot: 1087518
Assy Lot: 2517212

Exposure date: 11/15/2022

TPS7H4001-SHP

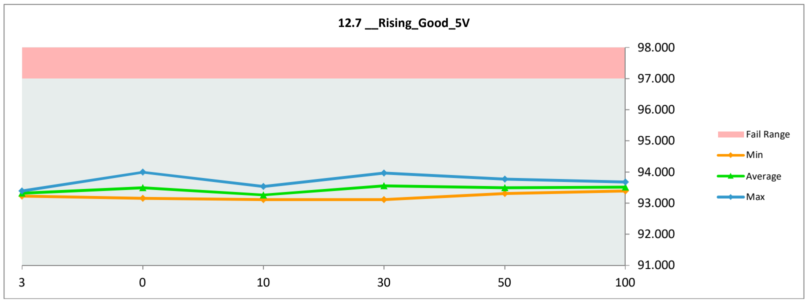
	12.7 __Rising_Good_5V	
Test Site	unkins Lab - Dalla	unkins Lab - Dallas
Tester	TS364 - FETS3641	TS364 - FETS36412
Test Number	EB588003	EB588003
Unit		
Max Limit	97	97
Min Limit		

krad(Si)	Serial #	Pre_Unbiased	Post_unbiased	Delta
100	27	93.349	93.444	0.095
100	28	93.336	93.508	0.172
100	29	93.232	93.391	0.159
100	30	93.783	93.681	-0.102
100	31	93.397	93.563	0.166
50	41	93.308	93.393	0.085
50	42	93.313	93.533	0.220
50	43	93.353	93.444	0.091
50	44	93.696	93.776	0.080
50	45	93.304	93.309	0.005
30	51	93.557	93.656	0.099
30	52	93.032	93.116	0.084
30	53	93.611	93.782	0.171
30	54	93.255	93.255	0.000
30	55	93.874	93.970	0.096
10	61	93.224	93.226	0.002
10	62	93.112	93.112	0.000
10	63	93.034	93.118	0.084
10	64	93.436	93.531	0.095
10	65	93.230	93.309	0.079
3	71	93.231	93.230	-0.001
3	72	93.269	93.273	0.004
3	73	93.397	93.391	-0.006
3	74	93.336	93.333	-0.003
3	75	93.442	93.368	-0.074
0	33	93.142	93.150	0.008
0	34	93.328	93.326	-0.002
0	35	93.999	93.995	-0.004
	Max	93.999	93.995	0.220
	Average	93.378	93.435	0.057
	Min	93.032	93.112	-0.102
	Std Dev	0.235	0.242	0.078



	12.7 __Rising_Good_5V
Test Site	unkins Lab - Dallas
Tester	TS364 - FETS36412
Test Number	EB588003
Max Limit	97
Min Limit	

krad(Si)	3	0	10	30	50	100
LL						
Min	93.230	93.150	93.112	93.116	93.309	93.391
Average	93.319	93.490	93.259	93.556	93.491	93.517
Max	93.391	93.995	93.531	93.970	93.776	93.681
UL	97.000	97.000	97.000	97.000	97.000	97.000



TID Unbiased HDR Report

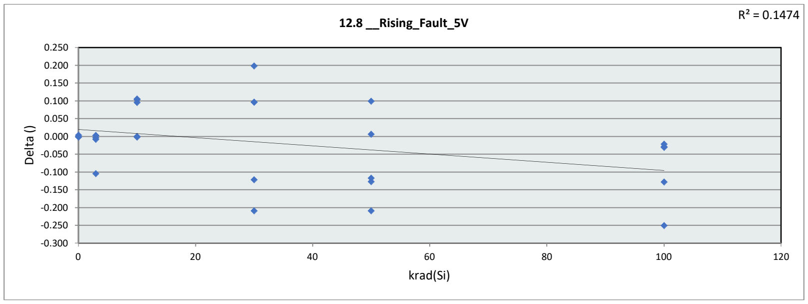
Die lot: 1087518
Assy Lot: 2517212

Exposure date: 11/15/2022

TPS7H4001-SHP

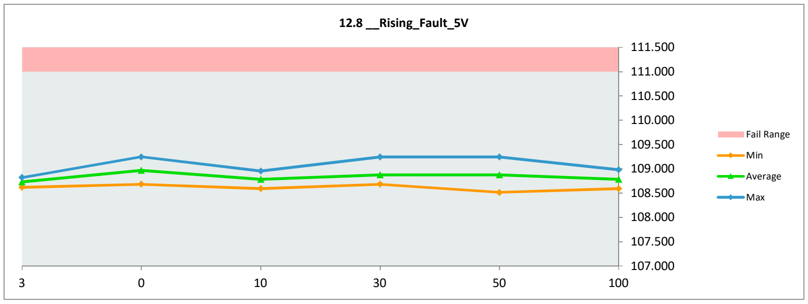
	12.8 __Rising_Fault_5V	
Test Site	unkins Lab - Dalla	unkins Lab - Dallas
Tester	TS364 - FETS3641	TS364 - FETS36412
Test Number	EB588003	EB588003
Unit		
Max Limit	111	111
Min Limit		

krad(Si)	Serial #	Pre_Unbiased	Post_unbiased	Delta
100	27	108.972	108.844	-0.128
100	28	108.803	108.772	-0.031
100	29	108.982	108.731	-0.251
100	30	109.009	108.980	-0.029
100	31	108.612	108.590	-0.022
50	41	109.167	109.050	-0.117
50	42	108.723	108.514	-0.209
50	43	108.758	108.631	-0.127
50	44	109.145	109.244	0.099
50	45	108.947	108.953	0.006
30	51	108.586	108.682	0.096
30	52	109.148	109.244	0.096
30	53	108.824	109.022	0.198
30	54	108.920	108.711	-0.209
30	55	108.853	108.731	-0.122
10	61	108.626	108.624	-0.002
10	62	108.590	108.590	0.000
10	63	108.694	108.797	0.103
10	64	108.850	108.945	0.095
10	65	108.850	108.955	0.105
3	71	108.628	108.620	-0.008
3	72	108.653	108.655	0.002
3	73	108.819	108.821	0.002
3	74	108.807	108.803	-0.004
3	75	108.857	108.752	-0.105
0	33	108.977	108.976	-0.001
0	34	108.684	108.682	-0.002
0	35	109.243	109.246	0.003
	Max	109.243	109.246	0.198
	Average	108.847	108.827	-0.020
	Min	108.586	108.514	-0.251
	Std Dev	0.186	0.206	0.107



	12.8 __Rising_Fault_5V
Test Site	unkins Lab - Dallas
Tester	TS364 - FETS36412
Test Number	EB588003
Max Limit	111
Min Limit	

krad(Si)	3	0	10	30	50	100
LL						
Min	108.620	108.682	108.590	108.682	108.514	108.590
Average	108.730	108.968	108.782	108.878	108.878	108.783
Max	108.821	109.246	108.955	109.244	109.244	108.980
UL	111.000	111.000	111.000	111.000	111.000	111.000



TID Unbiased HDR Report

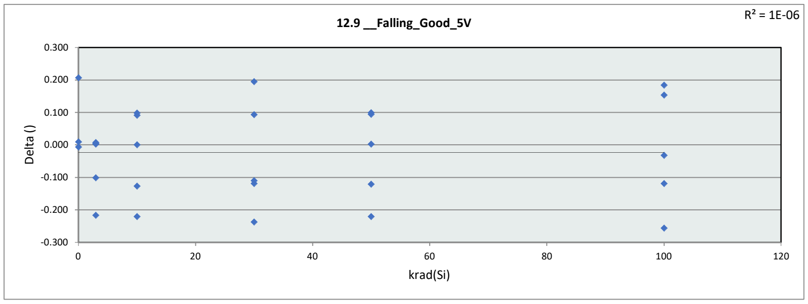
Die lot: 1087518
Assy Lot: 2517212

Exposure date: 11/15/2022

TPS7H4001-SHP

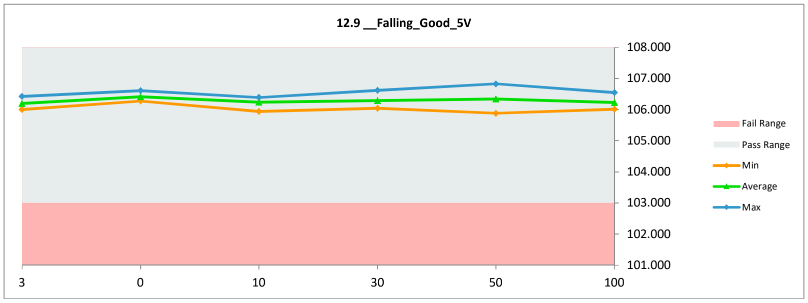
	12.9 __Falling_Good_5V	
Test Site	unkins Lab - Dalla	unkins Lab - Dallas
Tester	TS364 - FETS3641	TS364 - FETS36412
Test Number	EB588003	EB588003
Unit		
Max Limit		
Min Limit	103	103

krad(Si)	Serial #	Pre_Unbiased	Post_unbiased	Delta
100	27	106.127	106.008	-0.119
100	28	106.166	106.350	0.184
100	29	106.326	106.070	-0.256
100	30	106.389	106.542	0.153
100	31	106.198	106.166	-0.032
50	41	106.541	106.420	-0.121
50	42	106.103	105.883	-0.220
50	43	106.136	106.235	0.099
50	44	106.732	106.826	0.094
50	45	106.326	106.328	0.002
30	51	106.160	106.041	-0.119
30	52	106.727	106.617	-0.110
30	53	106.192	106.387	0.195
30	54	106.295	106.058	-0.237
30	55	106.228	106.321	0.093
10	61	106.228	106.228	0.000
10	62	106.164	105.944	-0.220
10	63	106.291	106.389	0.098
10	64	106.237	106.328	0.091
10	65	106.444	106.317	-0.127
3	71	106.220	106.004	-0.216
3	72	106.043	106.045	0.002
3	73	106.413	106.420	0.007
3	74	106.162	106.166	0.004
3	75	106.446	106.345	-0.101
0	33	106.138	106.345	0.207
0	34	106.283	106.277	-0.006
0	35	106.604	106.613	0.009
	Max	106.732	106.826	0.207
	Average	106.297	106.274	-0.023
	Min	106.043	105.883	-0.256
	Std Dev	0.182	0.222	0.138



	12.9 __Falling_Good_5V
Test Site	unkins Lab - Dallas
Tester	TS364 - FETS36412
Test Number	EB588003
Max Limit	
Min Limit	103

krad(Si)	3	0	10	30	50	100
LL	103.000	103.000	103.000	103.000	103.000	103.000
Min	106.004	106.277	105.944	106.041	105.883	106.008
Average	106.196	106.412	106.241	106.285	106.338	106.227
Max	106.420	106.613	106.389	106.617	106.826	106.542
UL						



TID Unbiased HDR Report

Die lot: 1087518

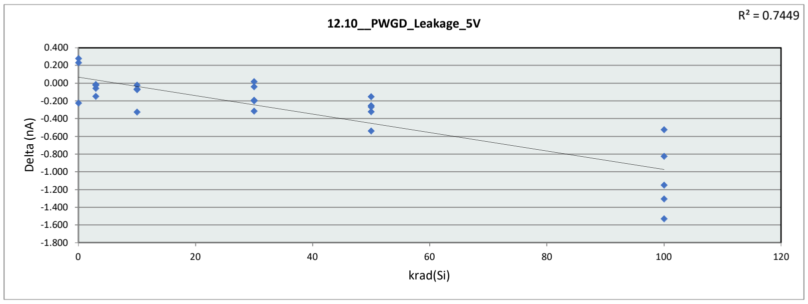
Assy Lot: 2517212

Exposure date: 11/15/2022

TPS7H4001-SHP

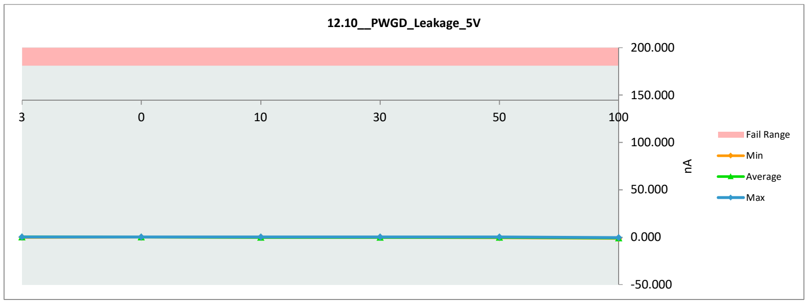
	12.10__PWGD_Leakage_5V	
Test Site	unkins Lab - Dalla	unkins Lab - Dallas
Tester	TS364 - FETS3641	TS364 - FETS36412
Test Number	EB588003	EB588003
Unit	nA	nA
Max Limit	181	181
Min Limit		

krad(Si)	Serial #	Pre_Unbiased	Post_unbiased	Delta
100	27	0.143	-0.381	-0.524
100	28	0.105	-0.719	-0.824
100	29	0.287	-1.020	-1.307
100	30	0.108	-1.042	-1.150
100	31	0.312	-1.218	-1.530
50	41	0.297	0.146	-0.151
50	42	0.306	-0.232	-0.538
50	43	0.255	0.000	-0.255
50	44	0.310	0.041	-0.269
50	45	0.255	-0.068	-0.323
30	51	0.049	0.067	0.018
30	52	0.243	0.201	-0.042
30	53	0.350	0.152	-0.198
30	54	0.217	0.025	-0.192
30	55	0.263	-0.052	-0.315
10	61	0.302	0.229	-0.073
10	62	0.199	0.177	-0.022
10	63	0.326	0.001	-0.325
10	64	0.094	0.027	-0.067
10	65	0.109	0.040	-0.069
3	71	0.083	0.067	-0.016
3	72	0.149	0.126	-0.023
3	73	0.300	0.280	-0.020
3	74	0.297	0.238	-0.059
3	75	0.260	0.112	-0.148
0	33	0.338	0.113	-0.225
0	34	0.091	0.321	0.230
0	35	-0.166	0.112	0.278
	Max	0.350	0.321	0.278
	Average	0.210	-0.081	-0.291
	Min	-0.166	-1.218	-1.530
	Std Dev	0.118	0.414	0.431



	12.10__PWGD_Leakage_5V	
Test Site	unkins Lab - Dallas	
Tester	TS364 - FETS36412	
Test Number	EB588003	
Max Limit	181	nA
Min Limit		nA

krad(Si)	3	0	10	30	50	100
LL						
Min	0.067	0.112	0.001	-0.052	-0.232	-1.218
Average	0.165	0.182	0.095	0.079	-0.023	-0.876
Max	0.280	0.321	0.229	0.201	0.146	-0.381
UL	181.000	181.000	181.000	181.000	181.000	181.000



TID Unbiased HDR Report

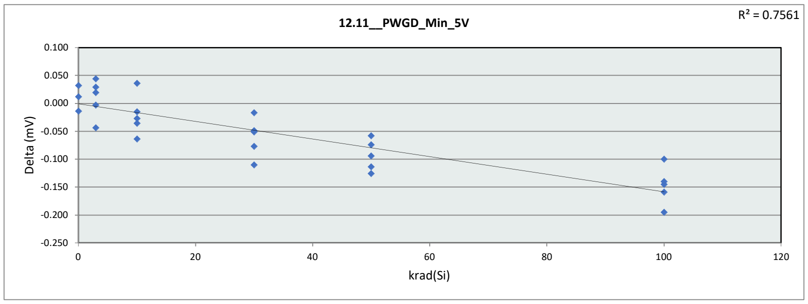
Die lot: 1087518
Assy Lot: 2517212

Exposure date: 11/15/2022

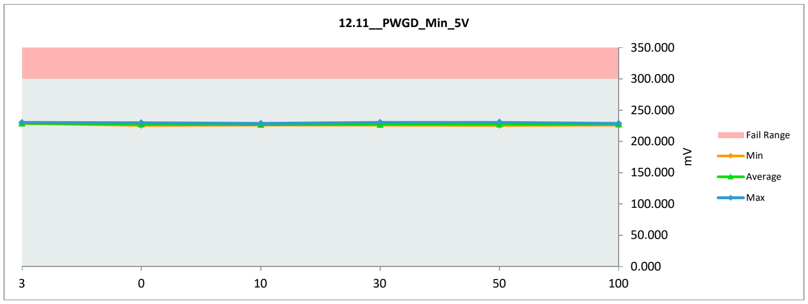
TPS7H4001-SHP

	12.11__PWGD_Min_5V	
Test Site	unkins Lab - Dalla	unkins Lab - Dallas
Tester	TS364 - FETS3641	TS364 - FETS36412
Test Number	EB588003	EB588003
Unit	mV	mV
Max Limit	300	300
Min Limit		

krad(Si)	Serial #	Pre_Unbiased	Post_unbiased	Delta
100	27	228.523	228.423	-0.100
100	28	227.872	227.677	-0.195
100	29	226.339	226.199	-0.140
100	30	229.039	228.880	-0.159
100	31	227.511	227.366	-0.145
50	41	230.884	230.758	-0.126
50	42	226.084	226.026	-0.058
50	43	226.496	226.422	-0.074
50	44	230.449	230.335	-0.114
50	45	226.349	226.255	-0.094
30	51	226.823	226.772	-0.051
30	52	230.227	230.150	-0.077
30	53	226.384	226.274	-0.110
30	54	226.340	226.323	-0.017
30	55	227.451	227.402	-0.049
10	61	227.128	227.164	0.036
10	62	227.152	227.137	-0.015
10	63	226.503	226.439	-0.064
10	64	228.088	228.061	-0.027
10	65	228.783	228.747	-0.036
3	71	228.708	228.737	0.029
3	72	229.442	229.461	0.019
3	73	229.141	229.138	-0.003
3	74	230.390	230.346	-0.044
3	75	228.584	228.628	0.044
0	33	230.057	230.089	0.032
0	34	225.792	225.778	-0.014
0	35	227.640	227.652	0.012
	Max	230.884	230.758	0.044
	Average	228.006	227.951	-0.055
	Min	225.792	225.778	-0.195
	Std Dev	1.526	1.529	0.065



	12.11__PWGD_Min_5V					
Test Site	unkins Lab - Dallas					
Tester	S364 - FETS36412					
Test Number	EB588003					
Max Limit	300	mV				
Min Limit		mV				
krad(Si)	3	0	10	30	50	100
LL						
Min	228.628	225.778	226.439	226.274	226.026	226.199
Average	229.262	227.840	227.510	227.384	227.959	227.709
Max	230.346	230.089	228.747	230.150	230.758	228.880
UL	300.000	300.000	300.000	300.000	300.000	300.000



TID Unbiased HDR Report

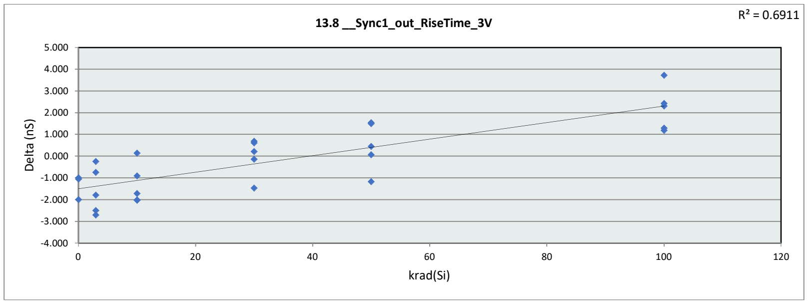
Die lot: 1087518
Assy Lot: 2517212

Exposure date: 11/15/2022

TPS7H4001-SHP

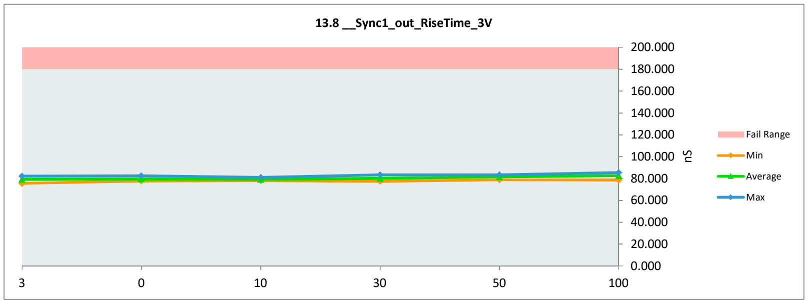
	13.8 __Sync1_out_RiseTime_3V	
Test Site	unkins Lab - Dalla	unkins Lab - Dallas
Tester	TS364 - FETS3641	TS364 - FETS36412
Test Number	EB588003	EB588003
Unit	nS	nS
Max Limit	180	180
Min Limit		

krad(Si)	Serial #	Pre_Unbiased	Post_unbiased	Delta
100	27	76.479	78.790	2.311
100	28	81.686	85.401	3.715
100	29	80.608	83.024	2.416
100	30	81.974	83.263	1.289
100	31	81.781	82.967	1.186
50	41	81.402	82.895	1.493
50	42	81.605	81.662	0.057
50	43	79.116	80.650	1.534
50	44	84.493	83.323	-1.170
50	45	78.401	78.853	0.452
30	51	83.436	83.293	-0.143
30	52	80.853	79.385	-1.468
30	53	77.234	77.451	0.217
30	54	81.894	82.507	0.613
30	55	77.210	77.893	0.683
10	61	78.913	79.048	0.135
10	62	81.312	79.286	-2.026
10	63	80.095	78.073	-2.022
10	64	79.583	78.669	-0.914
10	65	82.691	80.968	-1.723
3	71	80.895	80.146	-0.749
3	72	81.973	79.271	-2.702
3	73	81.850	79.353	-2.497
3	74	83.971	82.173	-1.798
3	75	75.745	75.504	-0.241
0	33	83.385	82.391	-0.994
0	34	78.705	77.648	-1.057
0	35	80.776	78.773	-2.003
	Max	84.493	85.401	3.715
	Average	80.645	80.452	-0.193
	Min	75.745	75.504	-2.702
	Std Dev	2.250	2.376	1.630



	13.8 __Sync1_out_RiseTime_3	
Test Site	unkins Lab - Dallas	
Tester	S364 - FETS36412	
Test Number	EB588003	
Max Limit	180	nS
Min Limit		nS

krad(Si)	3	0	10	30	50	100
LL						
Min	75.504	77.648	78.073	77.451	78.853	78.790
Average	79.289	79.604	79.209	80.106	81.477	82.689
Max	82.173	82.391	80.968	83.293	83.323	85.401
UL	180.000	180.000	180.000	180.000	180.000	180.000



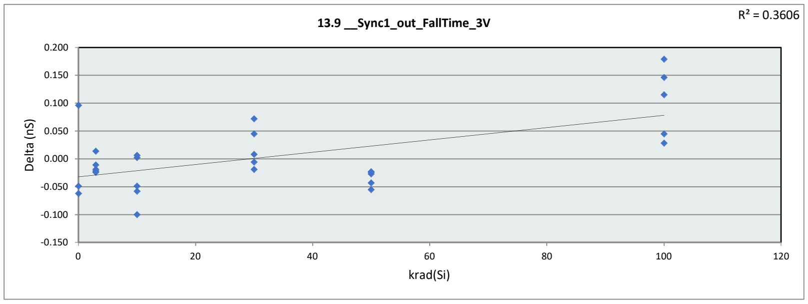
TID Unbiased HDR Report

Die lot: 1087518
Assy Lot: 2517212

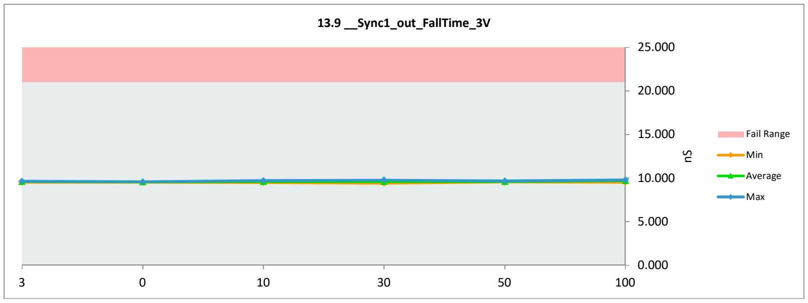
Exposure date: 11/15/2022

TPS7H4001-SHP

		13.9 __Sync1_out_FallTime_3V		
Test Site		unkins Lab - Dalla	unkins Lab - Dallas	
Tester		TS364 - FETS3641	TS364 - FETS36412	
Test Number		EB588003	EB588003	
Unit		nS	nS	
Max Limit		21	21	
Min Limit				
krad(Si)	Serial #	Pre_Unbiased	Post_unbiased	Delta
100	27	9.487	9.515	0.028
100	28	9.710	9.755	0.045
100	29	9.563	9.742	0.179
100	30	9.631	9.777	0.146
100	31	9.610	9.725	0.115
50	41	9.622	9.598	-0.024
50	42	9.685	9.662	-0.023
50	43	9.698	9.655	-0.043
50	44	9.683	9.628	-0.055
50	45	9.574	9.547	-0.027
30	51	9.771	9.779	0.008
30	52	9.502	9.547	0.045
30	53	9.334	9.406	0.072
30	54	9.695	9.689	-0.006
30	55	9.639	9.620	-0.019
10	61	9.575	9.475	-0.100
10	62	9.749	9.700	-0.049
10	63	9.593	9.599	0.006
10	64	9.634	9.636	0.002
10	65	9.665	9.607	-0.058
3	71	9.594	9.583	-0.011
3	72	9.652	9.633	-0.019
3	73	9.602	9.616	0.014
3	74	9.658	9.636	-0.022
3	75	9.559	9.535	-0.024
0	33	9.631	9.582	-0.049
0	34	9.437	9.533	0.096
0	35	9.634	9.572	-0.062
	Max	9.771	9.779	0.179
	Average	9.614	9.620	0.006
	Min	9.334	9.406	-0.100
	Std Dev	0.093	0.090	0.065



	13.9 __Sync1_out_FallTime_3					
Test Site	unkins Lab - Dallas					
Tester	S364 - FETS36412					
Test Number	EB588003					
Max Limit	21	nS				
Min Limit		nS				
krad(Si)	3	0	10	30	50	100
LL						
Min	9.535	9.533	9.475	9.406	9.547	9.515
Average	9.601	9.562	9.603	9.608	9.618	9.703
Max	9.636	9.582	9.700	9.779	9.662	9.777
UL	21.000	21.000	21.000	21.000	21.000	21.000



TID Unbiased HDR Report

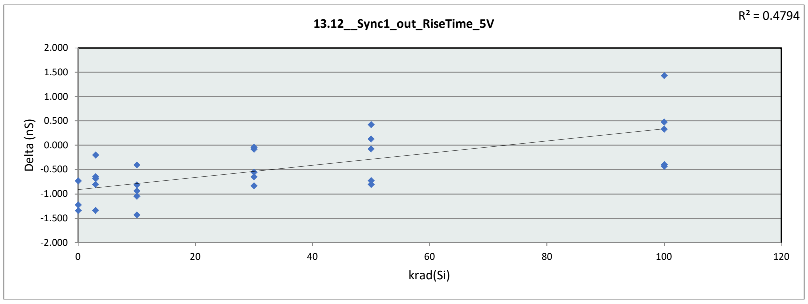
Die lot: 1087518
Assy Lot: 2517212

Exposure date: 11/15/2022

TPS7H4001-SHP

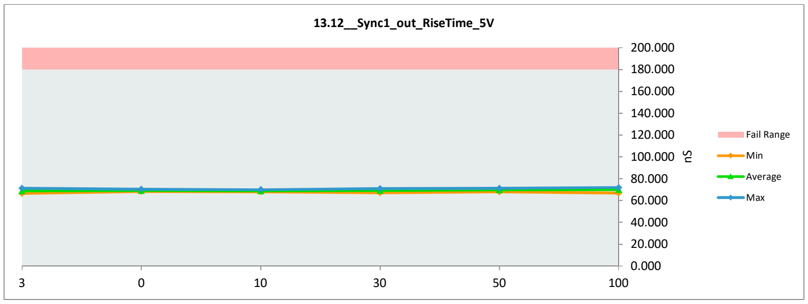
	13.12__Sync1_out_RiseTime_5\	
Test Site	unkins Lab - Dalla	unkins Lab - Dallas
Tester	TS364 - FETS3641	TS364 - FETS36412
Test Number	EB588003	EB588003
Unit	nS	nS
Max Limit	180	180
Min Limit		

krad(Si)	Serial #	Pre_Unbiased	Post_unbiased	Delta
100	27	67.165	66.768	-0.397
100	28	70.500	71.931	1.431
100	29	70.049	70.383	0.334
100	30	70.386	70.860	0.474
100	31	70.374	69.941	-0.433
50	41	71.192	71.320	0.128
50	42	69.096	69.521	0.425
50	43	69.621	68.813	-0.808
50	44	71.634	70.906	-0.728
50	45	68.106	68.033	-0.073
30	51	71.732	70.898	-0.834
30	52	70.592	70.033	-0.559
30	53	67.187	67.141	-0.046
30	54	70.182	70.102	-0.080
30	55	68.627	67.979	-0.648
10	61	68.959	68.557	-0.402
10	62	69.669	68.242	-1.427
10	63	69.008	68.072	-0.936
10	64	69.820	69.010	-0.810
10	65	71.000	69.954	-1.046
3	71	69.193	68.548	-0.645
3	72	70.461	69.655	-0.806
3	73	68.873	68.184	-0.689
3	74	71.415	71.211	-0.204
3	75	67.861	66.522	-1.339
0	33	71.632	70.289	-1.343
0	34	68.931	68.198	-0.733
0	35	70.678	69.453	-1.225
	Max	71.732	71.931	1.431
	Average	69.784	69.304	-0.479
	Min	67.165	66.522	-1.427
	Std Dev	1.295	1.431	0.643



	13.12__Sync1_out_RiseTime_	
Test Site	unkins Lab - Dallas	
Tester	S364 - FETS36412	
Test Number	EB588003	
Max Limit	180	nS
Min Limit		nS

krad(Si)	3	0	10	30	50	100
LL						
Min	66.522	68.198	68.072	67.141	68.033	66.768
Average	68.824	69.313	68.767	69.231	69.719	69.977
Max	71.211	70.289	69.954	70.898	71.320	71.931
UL	180.000	180.000	180.000	180.000	180.000	180.000



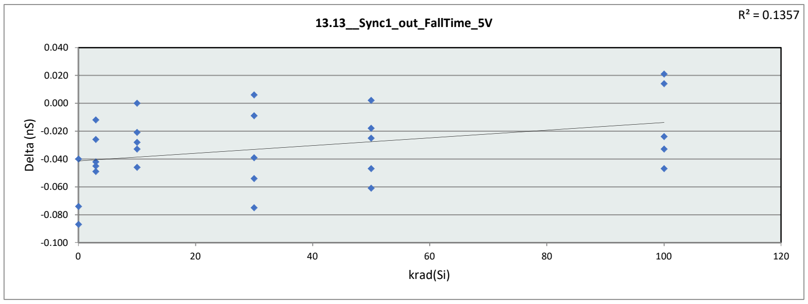
TID Unbiased HDR Report

Die lot: 1087518
Assy Lot: 2517212

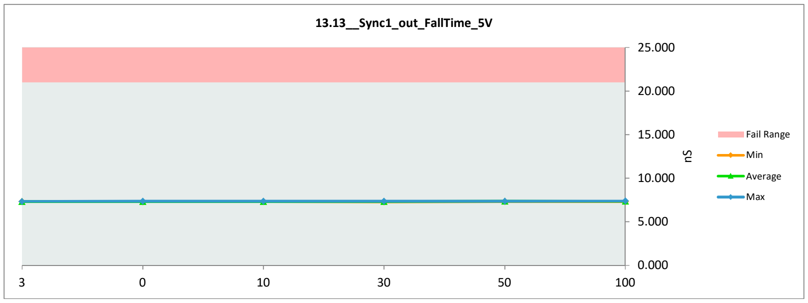
Exposure date: 11/15/2022

TPS7H4001-SHP

		13.13__Sync1_out_FallTime_5V		
	Test Site	unkins Lab - Dalla	unkins Lab - Dallas	
	Tester	TS364 - FETS3641	TS364 - FETS36412	
	Test Number	EB588003	EB588003	
	Unit	nS	nS	
	Max Limit	21	21	
	Min Limit			
krad(Si)	Serial #	Pre_Unbiased	Post_unbiased	Delta
100	27	7.342	7.318	-0.024
100	28	7.371	7.385	0.014
100	29	7.375	7.328	-0.047
100	30	7.386	7.353	-0.033
100	31	7.365	7.386	0.021
50	41	7.407	7.360	-0.047
50	42	7.364	7.366	0.002
50	43	7.421	7.360	-0.061
50	44	7.375	7.350	-0.025
50	45	7.346	7.328	-0.018
30	51	7.368	7.374	0.006
30	52	7.336	7.327	-0.009
30	53	7.343	7.304	-0.039
30	54	7.395	7.341	-0.054
30	55	7.400	7.325	-0.075
10	61	7.368	7.322	-0.046
10	62	7.379	7.358	-0.021
10	63	7.347	7.347	0.000
10	64	7.380	7.347	-0.033
10	65	7.373	7.345	-0.028
3	71	7.380	7.338	-0.042
3	72	7.343	7.331	-0.012
3	73	7.366	7.340	-0.026
3	74	7.374	7.329	-0.045
3	75	7.380	7.331	-0.049
0	33	7.388	7.348	-0.040
0	34	7.377	7.303	-0.074
0	35	7.426	7.339	-0.087
	Max	7.426	7.386	0.021
	Average	7.374	7.342	-0.032
	Min	7.336	7.303	-0.087
	Std Dev	0.023	0.021	0.027



	13.13__Sync1_out_FallTime_					
Test Site	unkins Lab - Dallas					
Tester	'S364 - FETS36412					
Test Number	EB588003					
Max Limit	21	nS				
Min Limit		nS				
krad(Si)	3	0	10	30	50	100
LL						
Min	7.329	7.303	7.322	7.304	7.328	7.318
Average	7.334	7.330	7.344	7.334	7.353	7.354
Max	7.340	7.348	7.358	7.374	7.366	7.386
UL	21.000	21.000	21.000	21.000	21.000	21.000



TID Unbiased HDR Report

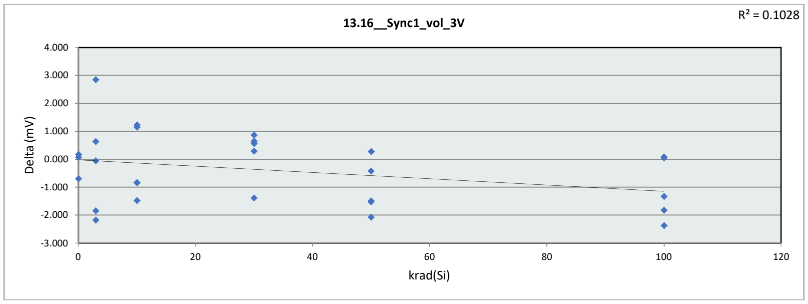
Die lot: 1087518
Assy Lot: 2517212

Exposure date: 11/15/2022

TPS7H4001-SHP

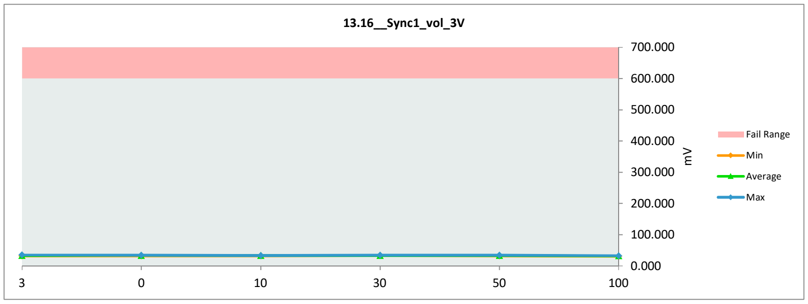
	13.16__Sync1_vol_3V	
Test Site	unkins Lab - Dalla	unkins Lab - Dallas
Tester	TS364 - FETS3641	TS364 - FETS36412
Test Number	EB588003	EB588003
Unit	mV	mV
Max Limit	600	600
Min Limit		

krad(Si)	Serial #	Pre_Unbiased	Post_unbiased	Delta
100	27	32.850	32.896	0.046
100	28	33.382	31.012	-2.370
100	29	33.409	31.583	-1.826
100	30	32.212	32.297	0.085
100	31	34.127	32.794	-1.333
50	41	36.090	34.012	-2.078
50	42	33.100	32.674	-0.426
50	43	34.109	32.620	-1.489
50	44	32.838	33.118	0.280
50	45	34.529	33.010	-1.519
30	51	33.676	34.313	0.637
30	52	32.752	33.316	0.564
30	53	33.382	33.664	0.282
30	54	34.353	32.962	-1.391
30	55	33.586	34.446	0.860
10	61	31.092	32.322	1.230
10	62	34.337	33.502	-0.835
10	63	34.877	33.397	-1.480
10	64	34.092	33.250	-0.842
10	65	32.530	33.682	1.152
3	71	34.217	32.366	-1.851
3	72	32.524	33.160	0.636
3	73	34.601	32.428	-2.173
3	74	29.695	32.533	2.838
3	75	35.316	35.262	-0.054
0	33	34.484	34.651	0.167
0	34	33.279	32.583	-0.696
0	35	34.019	34.085	0.066
	Max	36.090	35.262	2.838
	Average	33.552	33.141	-0.411
	Min	29.695	31.012	-2.370
	Std Dev	1.275	0.926	1.249



	13.16__Sync1_vol_3V	
Test Site	unkins Lab - Dallas	
Tester	S364 - FETS36412	
Test Number	EB588003	
Max Limit	600	mV
Min Limit		mV

krad(Si)	3	0	10	30	50	100
LL						
Min	32.366	32.583	32.322	32.962	32.620	31.012
Average	33.150	33.773	33.231	33.740	33.087	32.116
Max	35.262	34.651	33.682	34.446	34.012	32.896
UL	600.000	600.000	600.000	600.000	600.000	600.000



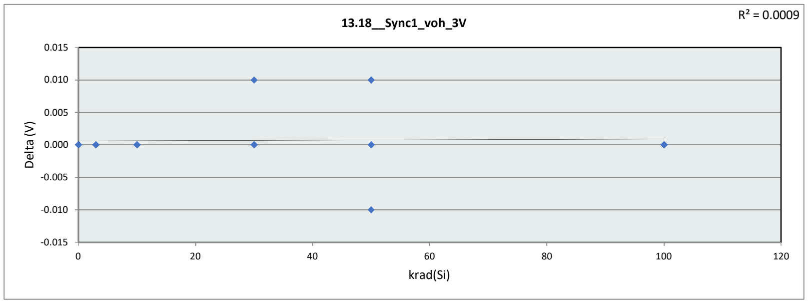
TID Unbiased HDR Report

Die lot: 1087518
Assy Lot: 2517212

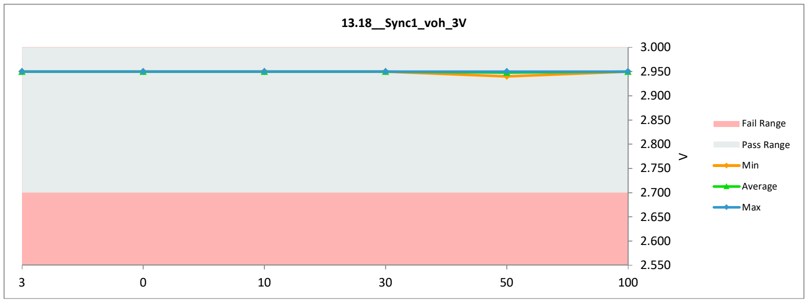
Exposure date: 11/15/2022

TPS7H4001-SHP

		13.18__Sync1_voh_3V		
	Test Site	unkins Lab - Dalla	unkins Lab - Dallas	
	Tester	TS364 - FETS3641	TS364 - FETS36412	
	Test Number	EB588003	EB588003	
	Unit	V	V	
	Max Limit			
	Min Limit	2.7	2.7	
krad(Si)	Serial #	Pre_Unbiased	Post_unbiased	Delta
100	27	2.950	2.950	0.000
100	28	2.950	2.950	0.000
100	29	2.950	2.950	0.000
100	30	2.950	2.950	0.000
100	31	2.950	2.950	0.000
50	41	2.950	2.950	0.000
50	42	2.940	2.950	0.010
50	43	2.940	2.950	0.010
50	44	2.950	2.950	0.000
50	45	2.950	2.940	-0.010
30	51	2.950	2.950	0.000
30	52	2.950	2.950	0.000
30	53	2.950	2.950	0.000
30	54	2.950	2.950	0.000
30	55	2.940	2.950	0.010
10	61	2.950	2.950	0.000
10	62	2.950	2.950	0.000
10	63	2.950	2.950	0.000
10	64	2.950	2.950	0.000
10	65	2.950	2.950	0.000
3	71	2.950	2.950	0.000
3	72	2.950	2.950	0.000
3	73	2.950	2.950	0.000
3	74	2.950	2.950	0.000
3	75	2.950	2.950	0.000
0	33	2.950	2.950	0.000
0	34	2.950	2.950	0.000
0	35	2.950	2.950	0.000
	Max	2.950	2.950	0.010
	Average	2.949	2.950	0.001
	Min	2.940	2.940	-0.010
	Std Dev	0.003	0.002	0.004



	13.18__Sync1_voh_3V					
Test Site	unkins Lab - Dallas					
Tester	S364 - FETS36412					
Test Number	EB588003					
Max Limit		V				
Min Limit	2.7	V				
krad(Si)	3	0	10	30	50	100
LL	2.700	2.700	2.700	2.700	2.700	2.700
Min	2.950	2.950	2.950	2.950	2.940	2.950
Average	2.950	2.950	2.950	2.950	2.948	2.950
Max	2.950	2.950	2.950	2.950	2.950	2.950
UL						



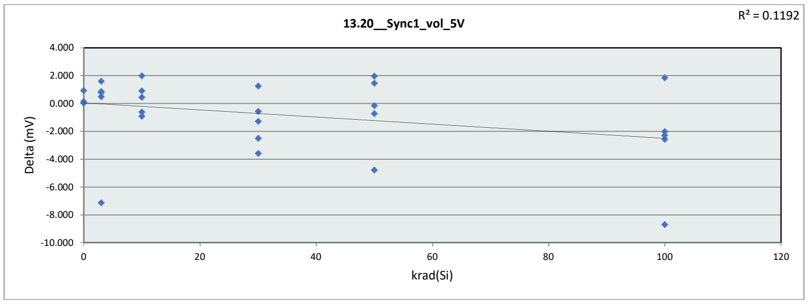
TID Unbiased HDR Report

Die lot: 1087518
Assy Lot: 2517212

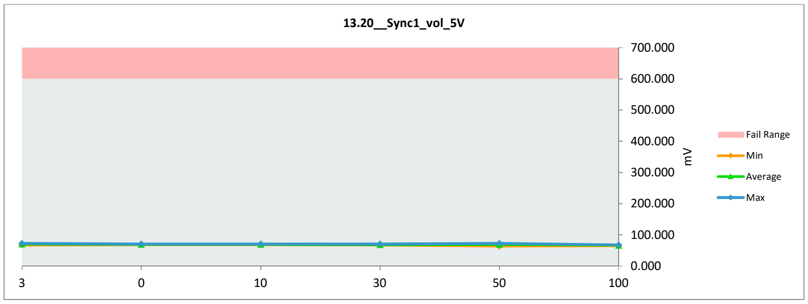
Exposure date: 11/15/2022

TPS7H4001-SHP

		13.20__Sync1_vol_5V		
	Test Site	unkins Lab - Dalla	unkins Lab - Dallas	
	Tester	TS364 - FETS3641	TS364 - FETS36412	
	Test Number	EB588003	EB588003	
	Unit	mV	mV	
	Max Limit	600	600	
	Min Limit			
krad(Si)	Serial #	Pre_Unbiased	Post_unbiased	Delta
100	27	75.191	66.502	-8.689
100	28	69.166	66.584	-2.582
100	29	65.894	67.743	1.849
100	30	67.869	65.852	-2.017
100	31	68.396	66.092	-2.304
50	41	71.676	70.949	-0.727
50	42	68.408	63.614	-4.794
50	43	70.685	70.514	-0.171
50	44	70.913	72.360	1.447
50	45	67.083	69.046	1.963
30	51	71.622	69.123	-2.499
30	52	72.252	68.668	-3.584
30	53	69.256	70.505	1.249
30	54	68.962	68.398	-0.564
30	55	68.738	67.461	-1.277
10	61	69.797	69.179	-0.618
10	62	68.241	68.680	0.439
10	63	70.998	70.067	-0.931
10	64	67.917	69.887	1.970
10	65	67.545	68.452	0.907
3	71	69.321	69.803	0.482
3	72	69.592	70.451	0.859
3	73	69.220	70.001	0.781
3	74	66.210	67.806	1.596
3	75	79.638	72.516	-7.122
0	33	69.905	69.923	0.018
0	34	68.278	68.427	0.149
0	35	69.707	70.638	0.931
	Max	79.638	72.516	1.970
	Average	69.731	68.901	-0.830
	Min	65.894	63.614	-8.689
	Std Dev	2.733	1.991	2.650



	13.20__Sync1_vol_5V					
Test Site	unkins Lab - Dallas					
Tester	TS364 - FETS36412					
Test Number	EB588003					
Max Limit	600	mV				
Min Limit		mV				
krad(Si)	3	0	10	30	50	100
LL						
Min	67.806	68.427	68.452	67.461	63.614	65.852
Average	70.115	69.663	69.253	68.831	69.297	66.555
Max	72.516	70.638	70.067	70.505	72.360	67.743
UL	600.000	600.000	600.000	600.000	600.000	600.000



TID Unbiased HDR Report

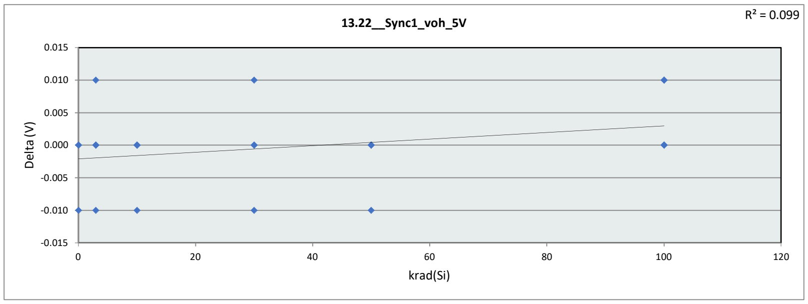
Die lot: 1087518

Exposure date: 11/15/2022

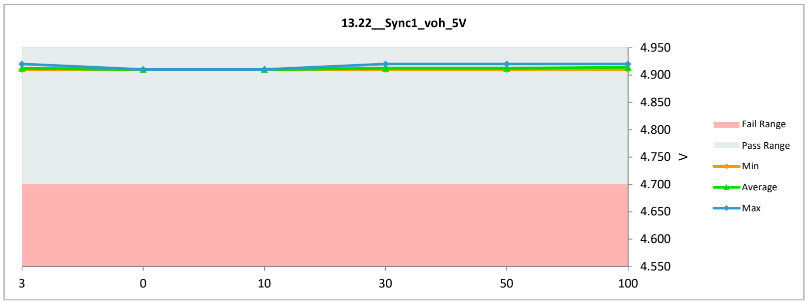
Assy Lot: 2517212

TPS7H4001-SHP

		13.22__Sync1_voh_5V		
	Test Site	unkins Lab - Dalla	unkins Lab - Dallas	
	Tester	TS364 - FETS3641	TS364 - FETS36412	
	Test Number	EB588003	EB588003	
	Unit	V	V	
	Max Limit			
	Min Limit	4.7	4.7	
krad(Si)	Serial #	Pre_Unbiased	Post_unbiased	Delta
100	27	4.910	4.910	0.000
100	28	4.910	4.920	0.010
100	29	4.910	4.920	0.010
100	30	4.910	4.910	0.000
100	31	4.910	4.910	0.000
50	41	4.920	4.910	-0.010
50	42	4.910	4.910	0.000
50	43	4.910	4.910	0.000
50	44	4.920	4.920	0.000
50	45	4.910	4.910	0.000
30	51	4.910	4.910	0.000
30	52	4.920	4.910	-0.010
30	53	4.910	4.920	0.010
30	54	4.910	4.910	0.000
30	55	4.910	4.910	0.000
10	61	4.910	4.910	0.000
10	62	4.910	4.910	0.000
10	63	4.910	4.910	0.000
10	64	4.920	4.910	-0.010
10	65	4.910	4.910	0.000
3	71	4.920	4.910	-0.010
3	72	4.910	4.910	0.000
3	73	4.910	4.910	0.000
3	74	4.910	4.910	0.000
3	75	4.910	4.920	0.010
0	33	4.910	4.910	0.000
0	34	4.920	4.910	-0.010
0	35	4.910	4.910	0.000
	Max	4.920	4.920	0.010
	Average	4.912	4.912	0.000
	Min	4.910	4.910	-0.010
	Std Dev	0.004	0.004	0.006



	13.22__Sync1_voh_5V					
Test Site	unkins Lab - Dallas					
Tester	S364 - FETS36412					
Test Number	EB588003					
Max Limit		V				
Min Limit	4.7	V				
krad(Si)	3	0	10	30	50	100
LL	4.700	4.700	4.700	4.700	4.700	4.700
Min	4.910	4.910	4.910	4.910	4.910	4.910
Average	4.912	4.910	4.910	4.912	4.912	4.914
Max	4.920	4.910	4.910	4.920	4.920	4.920
UL						



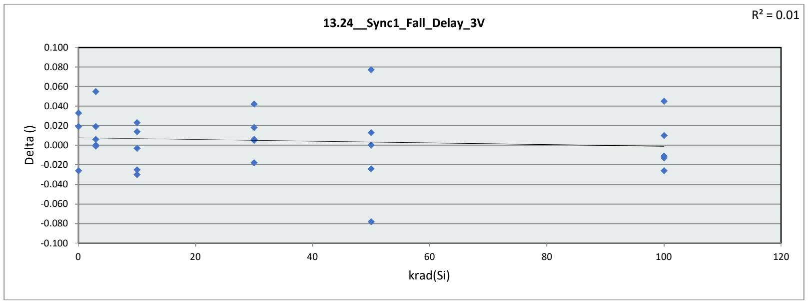
TID Unbiased HDR Report

Die lot: 1087518
Assy Lot: 2517212

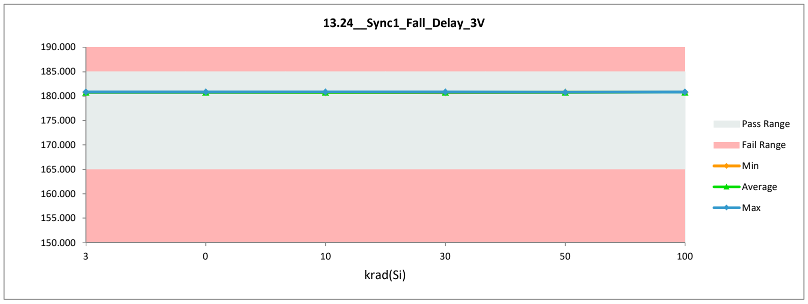
Exposure date: 11/15/2022

TPS7H4001-SHP

		13.24__Sync1_Fall_Delay_3V		
	Test Site	unkins Lab - Dalla	unkins Lab - Dallas	
	Tester	TS364 - FETS3641	TS364 - FETS36412	
	Test Number	EB588003	EB588003	
	Unit			
	Max Limit	185	185	
	Min Limit	165	165	
krad(Si)	Serial #	Pre_Unbiased	Post_unbiased	Delta
100	27	180.842	180.829	-0.013
100	28	180.795	180.805	0.010
100	29	180.823	180.797	-0.026
100	30	180.752	180.797	0.045
100	31	180.817	180.806	-0.011
50	41	180.792	180.805	0.013
50	42	180.848	180.770	-0.078
50	43	180.793	180.793	0.000
50	44	180.715	180.792	0.077
50	45	180.773	180.749	-0.024
30	51	180.843	180.848	0.005
30	52	180.749	180.767	0.018
30	53	180.744	180.750	0.006
30	54	180.756	180.738	-0.018
30	55	180.809	180.851	0.042
10	61	180.758	180.733	-0.025
10	62	180.847	180.870	0.023
10	63	180.780	180.750	-0.030
10	64	180.827	180.824	-0.003
10	65	180.770	180.784	0.014
3	71	180.764	180.764	0.000
3	72	180.756	180.755	-0.001
3	73	180.763	180.818	0.055
3	74	180.803	180.809	0.006
3	75	180.796	180.815	0.019
0	33	180.785	180.759	-0.026
0	34	180.771	180.790	0.019
0	35	180.812	180.845	0.033
	Max	180.848	180.870	0.077
	Average	180.789	180.793	0.005
	Min	180.715	180.733	-0.078
	Std Dev	0.035	0.037	0.031



	13.24__Sync1_Fall_Delay_3V					
Test Site	unkins Lab - Dallas					
Tester	TS364 - FETS36412					
Test Number	EB588003					
Max Limit	185					
Min Limit	165					
krad(Si)	3	0	10	30	50	100
LL	165.000	165.000	165.000	165.000	165.000	165.000
Min	180.755	180.759	180.733	180.738	180.749	180.797
Average	180.792	180.798	180.792	180.791	180.782	180.807
Max	180.818	180.845	180.870	180.851	180.805	180.829
UL	185.000	185.000	185.000	185.000	185.000	185.000



TID Unbiased HDR Report

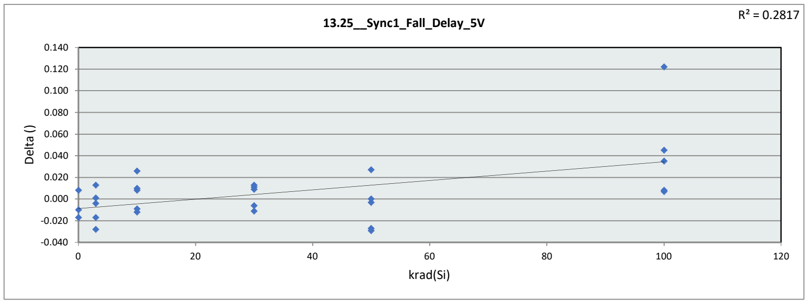
Die lot: 1087518
Assy Lot: 2517212

Exposure date: 11/15/2022

TPS7H4001-SHP

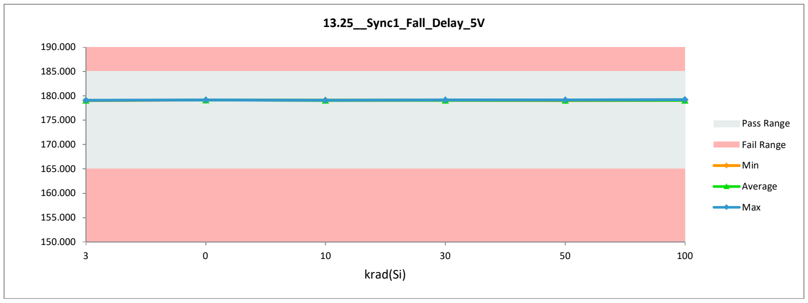
	13.25__Sync1_Fall_Delay_5V	
Test Site	unkins Lab - Dalla	unkins Lab - Dallas
Tester	TS364 - FETS3641	TS364 - FETS36412
Test Number	EB588003	EB588003
Unit		
Max Limit	185	185
Min Limit	165	165

krad(Si)	Serial #	Pre_Unbiased	Post_unbiased	Delta
100	27	179.188	179.223	0.035
100	28	179.094	179.101	0.007
100	29	179.083	179.128	0.045
100	30	178.955	179.077	0.122
100	31	179.067	179.075	0.008
50	41	179.128	179.128	0.000
50	42	179.132	179.159	0.027
50	43	179.034	179.031	-0.003
50	44	179.157	179.128	-0.029
50	45	179.126	179.099	-0.027
30	51	179.096	179.105	0.009
30	52	179.087	179.100	0.013
30	53	179.151	179.162	0.011
30	54	179.131	179.125	-0.006
30	55	179.170	179.159	-0.011
10	61	179.092	179.080	-0.012
10	62	179.112	179.122	0.010
10	63	179.102	179.128	0.026
10	64	179.104	179.112	0.008
10	65	179.113	179.104	-0.009
3	71	179.068	179.081	0.013
3	72	179.110	179.093	-0.017
3	73	179.008	179.004	-0.004
3	74	179.129	179.101	-0.028
3	75	179.078	179.079	0.001
0	33	179.158	179.148	-0.010
0	34	179.110	179.118	0.008
0	35	179.178	179.161	-0.017
	Max	179.188	179.223	0.122
	Average	179.106	179.112	0.006
	Min	178.955	179.004	-0.029
	Std Dev	0.050	0.043	0.029



	13.25__Sync1_Fall_Delay_5V
Test Site	unkins Lab - Dallas
Tester	S364 - FETS36412
Test Number	EB588003
Max Limit	185
Min Limit	165

krad(Si)	3	0	10	30	50	100
LL	165.000	165.000	165.000	165.000	165.000	165.000
Min	179.004	179.118	179.080	179.100	179.031	179.075
Average	179.072	179.142	179.109	179.130	179.109	179.121
Max	179.101	179.161	179.128	179.162	179.159	179.223
UL	185.000	185.000	185.000	185.000	185.000	185.000



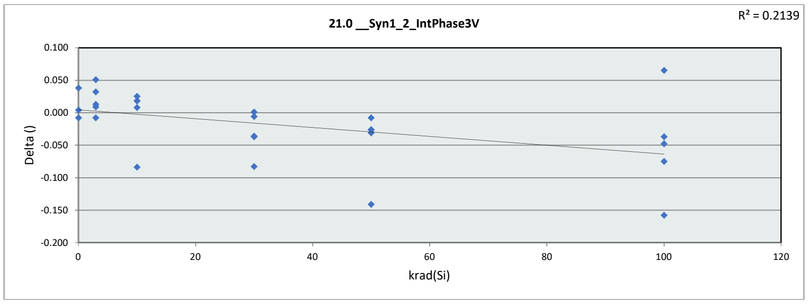
TID Unbiased HDR Report

Die lot: 1087518
Assy Lot: 2517212

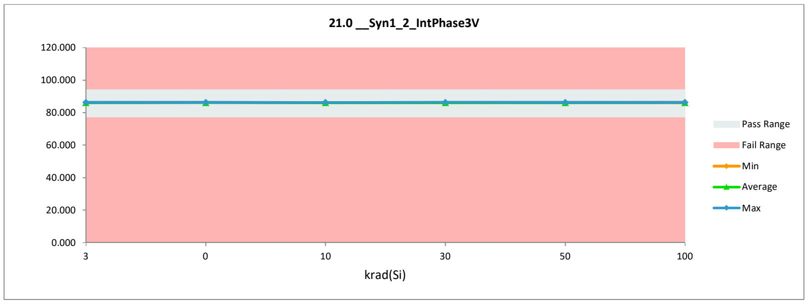
Exposure date: 11/15/2022

TPS7H4001-SHP

		21.0 __Syn1_2_IntPhase3V		
	Test Site	unkins Lab - Dalla	unkins Lab - Dallas	
	Tester	TS364 - FETS3641	TS364 - FETS36412	
	Test Number	EB588003	EB588003	
	Unit			
	Max Limit	94	94	
	Min Limit	77	77	
krad(Si)	Serial #	Pre_Unbiased	Post_unbiased	Delta
100	27	86.400	86.242	-0.158
100	28	86.146	86.071	-0.075
100	29	86.236	86.199	-0.037
100	30	86.061	86.126	0.065
100	31	86.159	86.111	-0.048
50	41	86.254	86.223	-0.031
50	42	86.129	85.988	-0.141
50	43	86.163	86.137	-0.026
50	44	86.296	86.288	-0.008
50	45	86.242	86.216	-0.026
30	51	86.041	86.035	-0.006
30	52	86.222	86.223	0.001
30	53	86.381	86.344	-0.037
30	54	86.141	86.058	-0.083
30	55	86.205	86.169	-0.036
10	61	86.153	86.069	-0.084
10	62	86.203	86.221	0.018
10	63	86.114	86.139	0.025
10	64	86.157	86.165	0.008
10	65	86.191	86.209	0.018
3	71	86.177	86.228	0.051
3	72	86.118	86.131	0.013
3	73	86.047	86.079	0.032
3	74	86.206	86.198	-0.008
3	75	86.199	86.208	0.009
0	33	86.165	86.169	0.004
0	34	86.191	86.183	-0.008
0	35	86.222	86.260	0.038
	Max	86.400	86.344	0.065
	Average	86.186	86.167	-0.019
	Min	86.041	85.988	-0.158
	Std Dev	0.083	0.081	0.052



	21.0 __Syn1_2_IntPhase3V					
Test Site	unkins Lab - Dallas					
Tester	S364 - FETS36412					
Test Number	EB588003					
Max Limit	94					
Min Limit	77					
krad(Si)	3	0	10	30	50	100
LL	77.000	77.000	77.000	77.000	77.000	77.000
Min	86.079	86.169	86.069	86.035	85.988	86.071
Average	86.169	86.204	86.161	86.166	86.170	86.150
Max	86.228	86.260	86.221	86.344	86.288	86.242
UL	94.000	94.000	94.000	94.000	94.000	94.000



TID Unbiased HDR Report

Die lot: 1087518

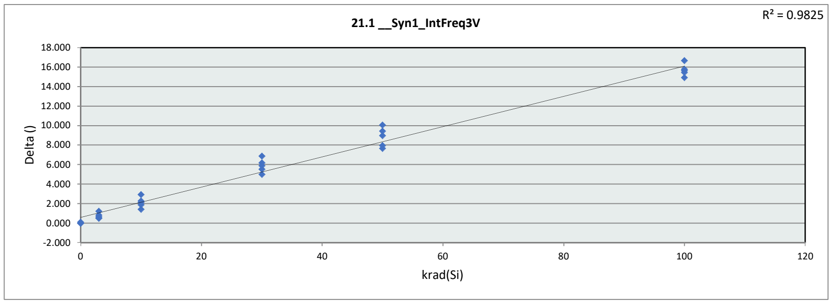
Assy Lot: 2517212

Exposure date: 11/15/2022

TPS7H4001-SHP

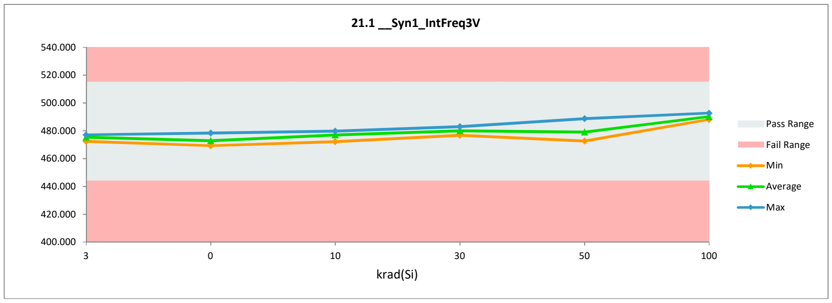
	21.1 __Syn1_IntFreq3V	
Test Site	unkins Lab - Dalla	unkins Lab - Dallas
Tester	TS364 - FETS3641	TS364 - FETS36412
Test Number	EB588003	EB588003
Unit		
Max Limit	515	515
Min Limit	444	444

krad(Si)	Serial #	Pre_Unbiased	Post_unbiased	Delta
100	27	473.843	488.773	14.930
100	28	473.693	489.467	15.774
100	29	472.471	488.107	15.636
100	30	475.066	491.731	16.665
100	31	477.298	492.725	15.427
50	41	464.751	472.703	7.952
50	42	481.004	488.646	7.642
50	43	469.397	478.840	9.443
50	44	463.750	472.720	8.970
50	45	472.057	482.119	10.062
30	51	472.875	479.736	6.861
30	52	470.901	476.789	5.888
30	53	473.605	478.601	4.996
30	54	476.814	482.979	6.165
30	55	476.090	481.598	5.508
10	61	475.745	478.021	2.276
10	62	476.789	479.703	2.914
10	63	470.830	472.248	1.418
10	64	476.160	478.268	2.108
10	65	475.412	477.295	1.883
3	71	476.232	476.896	0.664
3	72	471.982	472.492	0.510
3	73	476.266	477.076	0.810
3	74	475.754	476.974	1.220
3	75	472.623	473.118	0.495
0	33	469.243	469.242	-0.001
0	34	478.429	478.396	-0.033
0	35	470.899	471.008	0.109
	Max	481.004	492.725	16.665
	Average	473.571	479.510	5.939
	Min	463.750	469.242	-0.033
	Std Dev	3.829	6.499	5.573



	21.1 __Syn1_IntFreq3V
Test Site	unkins Lab - Dallas
Tester	TS364 - FETS36412
Test Number	EB588003
Max Limit	515
Min Limit	444

krad(Si)	3	0	10	30	50	100
LL	444.000	444.000	444.000	444.000	444.000	444.000
Min	472.492	469.242	472.248	476.789	472.703	488.107
Average	475.311	472.882	477.107	479.941	479.006	490.161
Max	477.076	478.396	479.703	482.979	488.646	492.725
UL	515.000	515.000	515.000	515.000	515.000	515.000



TID Unbiased HDR Report

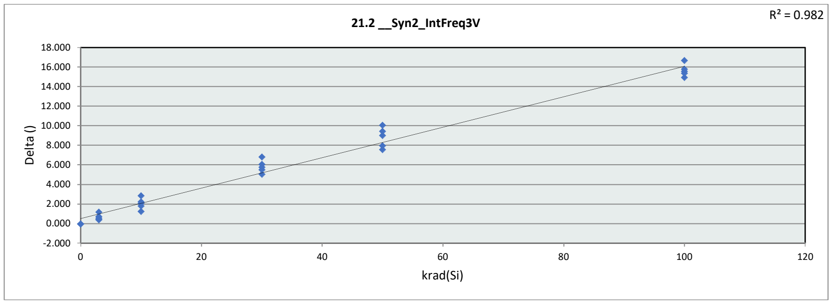
Die lot: 1087518

Assy Lot: 2517212

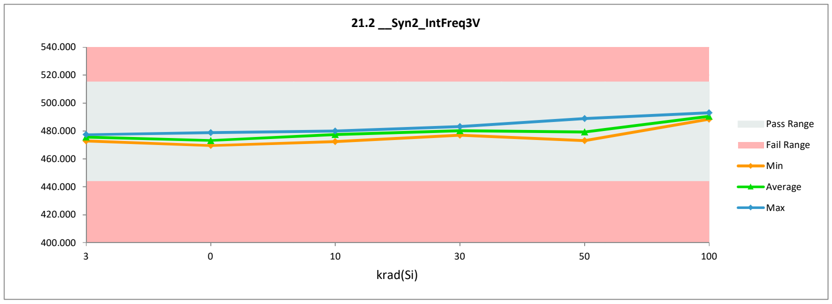
Exposure date: 11/15/2022

TPS7H4001-SHP

		21.2 __Syn2_IntFreq3V		
	Test Site	unkins Lab - Dalla	unkins Lab - Dallas	
	Tester	TS364 - FETS3641	TS364 - FETS36412	
	Test Number	EB588003	EB588003	
	Unit			
	Max Limit	515	515	
	Min Limit	444	444	
krad(Si)	Serial #	Pre_Unbiased	Post_unbiased	Delta
100	27	474.228	489.154	14.926
100	28	474.130	489.895	15.765
100	29	472.889	488.438	15.549
100	30	475.416	492.083	16.667
100	31	477.684	493.023	15.339
50	41	465.071	473.005	7.934
50	42	481.412	488.975	7.563
50	43	469.718	479.144	9.426
50	44	464.079	473.085	9.006
50	45	472.407	482.452	10.045
30	51	473.245	480.060	6.815
30	52	471.312	477.064	5.752
30	53	473.883	478.906	5.023
30	54	477.193	483.243	6.050
30	55	476.367	481.874	5.507
10	61	476.075	478.286	2.211
10	62	477.148	479.972	2.824
10	63	471.167	472.408	1.241
10	64	476.521	478.560	2.039
10	65	475.752	477.547	1.795
3	71	476.608	477.166	0.558
3	72	472.330	472.753	0.423
3	73	476.625	477.336	0.711
3	74	476.084	477.252	1.168
3	75	472.990	473.385	0.395
0	33	469.596	469.554	-0.042
0	34	478.751	478.721	-0.030
0	35	471.244	471.185	-0.059
	Max	481.412	493.023	16.667
	Average	473.926	479.804	5.879
	Min	464.079	469.554	-0.059
	Std Dev	3.836	6.530	5.596



	21.2 __Syn2_IntFreq3V					
Test Site	unkins Lab - Dallas					
Tester	TS364 - FETS36412					
Test Number	EB588003					
Max Limit	515					
Min Limit	444					
krad(Si)	3	0	10	30	50	100
LL	444.000	444.000	444.000	444.000	444.000	444.000
Min	472.753	469.554	472.408	477.064	473.005	488.438
Average	475.578	473.153	477.355	480.229	479.332	490.519
Max	477.336	478.721	479.972	483.243	488.975	493.023
UL	515.000	515.000	515.000	515.000	515.000	515.000



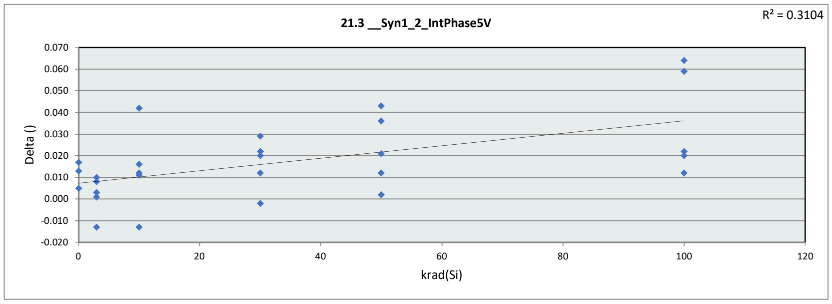
TID Unbiased HDR Report

Die lot: 1087518
Assy Lot: 2517212

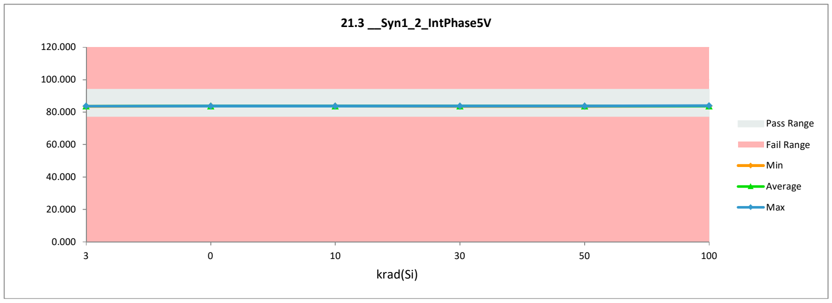
Exposure date: 11/15/2022

TPS7H4001-SHP

		21.3 __Syn1_2_IntPhase5V		
	Test Site	unkins Lab - Dalla	unkins Lab - Dallas	
	Tester	TS364 - FETS3641	TS364 - FETS36412	
	Test Number	EB588003	EB588003	
	Unit			
	Max Limit	94	94	
	Min Limit	77	77	
krad(Si)	Serial #	Pre_Unbiased	Post_unbiased	Delta
100	27	83.867	83.926	0.059
100	28	83.649	83.669	0.020
100	29	83.737	83.749	0.012
100	30	83.649	83.671	0.022
100	31	83.607	83.671	0.064
50	41	83.732	83.734	0.002
50	42	83.661	83.673	0.012
50	43	83.589	83.625	0.036
50	44	83.742	83.785	0.043
50	45	83.722	83.743	0.021
30	51	83.622	83.642	0.020
30	52	83.727	83.725	-0.002
30	53	83.807	83.829	0.022
30	54	83.687	83.699	0.012
30	55	83.725	83.754	0.029
10	61	83.657	83.668	0.011
10	62	83.711	83.723	0.012
10	63	83.732	83.748	0.016
10	64	83.693	83.735	0.042
10	65	83.718	83.705	-0.013
3	71	83.686	83.696	0.010
3	72	83.685	83.686	0.001
3	73	83.549	83.557	0.008
3	74	83.714	83.701	-0.013
3	75	83.642	83.645	0.003
0	33	83.726	83.743	0.017
0	34	83.680	83.685	0.005
0	35	83.729	83.742	0.013
	Max	83.867	83.926	0.064
	Average	83.694	83.712	0.017
	Min	83.549	83.557	-0.013
	Std Dev	0.064	0.068	0.018



	21.3 __Syn1_2_IntPhase5V					
Test Site	unkins Lab - Dallas					
Tester	TS364 - FETS36412					
Test Number	EB588003					
Max Limit	94					
Min Limit	77					
krad(Si)	3	0	10	30	50	100
LL	77.000	77.000	77.000	77.000	77.000	77.000
Min	83.557	83.685	83.668	83.642	83.625	83.669
Average	83.657	83.723	83.716	83.730	83.712	83.737
Max	83.701	83.743	83.748	83.829	83.785	83.926
UL	94.000	94.000	94.000	94.000	94.000	94.000



TID Unbiased HDR Report

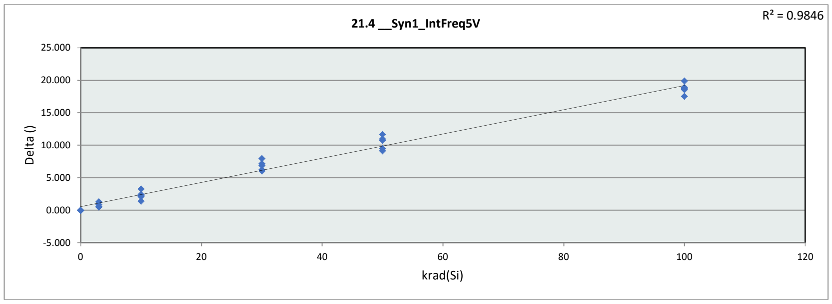
Die lot: 1087518

Assy Lot: 2517212

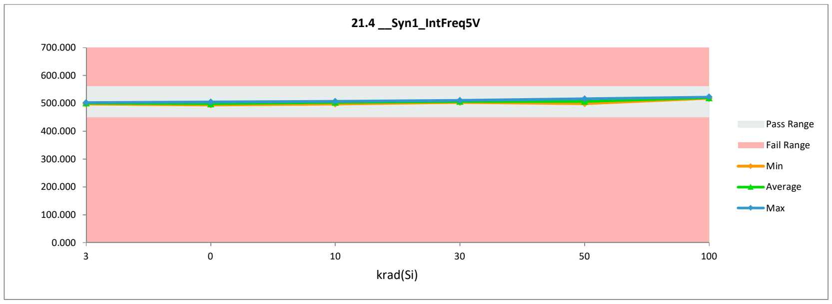
Exposure date: 11/15/2022

TPS7H4001-SHP

		21.4 ___Syn1_IntFreq5V		
	Test Site	unkins Lab - Dalla	unkins Lab - Dallas	
	Tester	TS364 - FETS3641	TS364 - FETS36412	
	Test Number	EB588003	EB588003	
	Unit			
	Max Limit	560	560	
	Min Limit	449	449	
krad(Si)	Serial #	Pre_Unbiased	Post_unbiased	Delta
100	27	499.926	517.456	17.530
100	28	500.285	519.159	18.874
100	29	499.761	518.306	18.545
100	30	501.642	521.545	19.903
100	31	503.832	522.510	18.678
50	41	489.649	499.138	9.489
50	42	507.541	516.665	9.124
50	43	495.589	506.557	10.968
50	44	489.962	500.739	10.777
50	45	498.427	510.070	11.643
30	51	498.663	506.595	7.932
30	52	496.670	503.536	6.866
30	53	499.100	505.130	6.030
30	54	502.880	510.028	7.148
30	55	501.273	507.512	6.239
10	61	501.685	504.123	2.438
10	62	503.418	506.696	3.278
10	63	495.814	497.222	1.408
10	64	501.225	503.529	2.304
10	65	501.690	503.781	2.091
3	71	502.297	502.876	0.579
3	72	497.206	497.731	0.525
3	73	501.953	502.799	0.846
3	74	501.502	502.804	1.302
3	75	499.587	500.083	0.496
0	33	493.897	493.890	-0.007
0	34	504.469	504.453	-0.016
0	35	495.500	495.457	-0.043
	Max	507.541	522.510	19.903
	Average	499.480	506.443	6.962
	Min	489.649	493.890	-0.043
	Std Dev	4.098	7.892	6.690



	21.4 ___Syn1_IntFreq5V					
Test Site	ınkins Lab - Dallas					
Tester	'S364 - FETS36412					
Test Number	EB588003					
Max Limit	560					
Min Limit	449					
krad(Si)	3	0	10	30	50	100
LL	449.000	449.000	449.000	449.000	449.000	449.000
Min	497.731	493.890	497.222	503.536	499.138	517.456
Average	501.259	497.933	503.070	506.560	506.634	519.795
Max	502.876	504.453	506.696	510.028	516.665	522.510
UL	560.000	560.000	560.000	560.000	560.000	560.000



TID Unbiased HDR Report

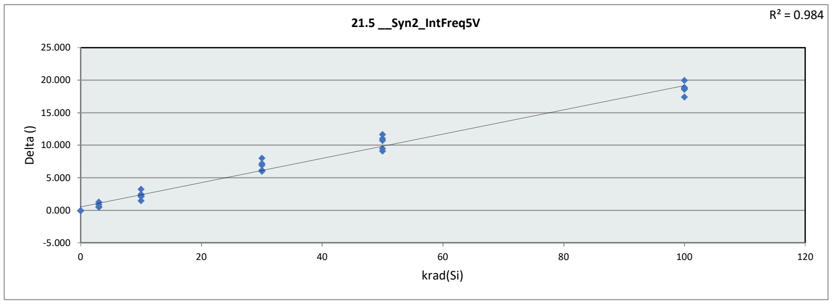
Die lot: 1087518
Assy Lot: 2517212

Exposure date: 11/15/2022

TPS7H4001-SHP

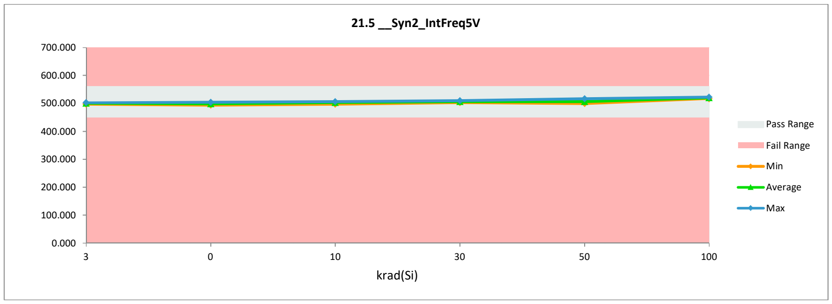
	21.5 ___Syn2_IntFreq5V	
Test Site	unkins Lab - Dalla	unkins Lab - Dallas
Tester	TS364 - FETS3641	TS364 - FETS36412
Test Number	EB588003	EB588003
Unit		
Max Limit	560	560
Min Limit	449	449

krad(Si)	Serial #	Pre_Unbiased	Post_unbiased	Delta
100	27	499.831	517.248	17.417
100	28	500.147	519.023	18.876
100	29	499.584	518.160	18.576
100	30	501.435	521.394	19.959
100	31	503.656	522.368	18.712
50	41	489.537	499.004	9.467
50	42	507.444	516.546	9.102
50	43	495.411	506.414	11.003
50	44	489.878	500.576	10.698
50	45	498.264	509.907	11.643
30	51	498.495	506.484	7.989
30	52	496.521	503.446	6.925
30	53	498.949	504.953	6.004
30	54	502.713	509.890	7.177
30	55	501.190	507.354	6.164
10	61	501.564	504.030	2.466
10	62	503.270	506.513	3.243
10	63	495.665	497.136	1.471
10	64	501.114	503.395	2.281
10	65	501.572	503.668	2.096
3	71	502.172	502.734	0.562
3	72	497.105	497.599	0.494
3	73	501.760	502.645	0.885
3	74	501.378	502.658	1.280
3	75	499.464	499.964	0.500
0	33	493.807	493.751	-0.056
0	34	504.373	504.314	-0.059
0	35	495.410	495.362	-0.048
	Max	507.444	522.368	19.959
	Average	499.347	506.305	6.958
	Min	489.537	493.751	-0.059
	Std Dev	4.091	7.882	6.695



	21.5 ___Syn2_IntFreq5V
Test Site	unkins Lab - Dallas
Tester	TS364 - FETS36412
Test Number	EB588003
Max Limit	560
Min Limit	449

krad(Si)	3	0	10	30	50	100
LL	449.000	449.000	449.000	449.000	449.000	449.000
Min	497.599	493.751	497.136	503.446	499.004	517.248
Average	501.120	497.809	502.948	506.425	506.489	519.639
Max	502.734	504.314	506.513	509.890	516.546	522.368
UL	560.000	560.000	560.000	560.000	560.000	560.000



TID Unbiased HDR Report

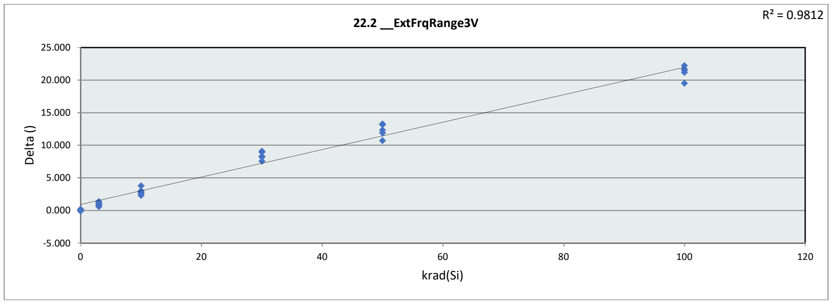
Die lot: 1087518
Assy Lot: 2517212

Exposure date: 11/15/2022

TPS7H4001-SHP

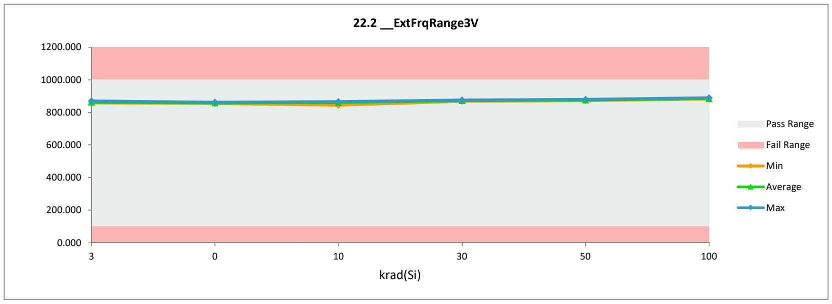
	22.2 ___ExtFrqRange3V		
Test Site	unkins Lab - Dalla	unkins Lab - Dallas	
Tester	TS364 - FETS3641	TS364 - FETS36412	
Test Number	EB588003	EB588003	
Unit			
Max Limit	1000	1000	
Min Limit	100	100	

krad(Si)	Serial #	Pre_Unbiased	Post_unbiased	Delta
100	27	867.974	890.163	22.189
100	28	860.257	881.408	21.151
100	29	860.792	882.332	21.540
100	30	863.457	882.984	19.527
100	31	862.547	884.194	21.647
50	41	867.881	878.575	10.694
50	42	867.422	879.769	12.347
50	43	860.425	873.682	13.257
50	44	862.722	874.620	11.898
50	45	858.688	871.839	13.151
30	51	859.687	868.614	8.927
30	52	862.491	870.709	8.218
30	53	866.990	874.560	7.570
30	54	867.112	876.223	9.111
30	55	863.183	871.497	8.314
10	61	864.725	867.037	2.312
10	62	859.462	863.263	3.801
10	63	840.520	843.338	2.818
10	64	863.213	866.220	3.007
10	65	860.457	863.039	2.582
3	71	858.368	859.152	0.784
3	72	856.739	857.855	1.116
3	73	864.236	865.199	0.963
3	74	861.524	862.912	1.388
3	75	869.152	869.759	0.607
0	33	855.095	855.298	0.203
0	34	863.356	863.230	-0.126
0	35	855.562	855.721	0.159
	Max	869.152	890.163	22.189
	Average	861.573	869.757	8.184
	Min	840.520	843.338	-0.126
	Std Dev	5.580	10.472	7.554



	22.2 ___ExtFrqRange3V
Test Site	unkins Lab - Dallas
Tester	TS364 - FETS36412
Test Number	EB588003
Max Limit	1000
Min Limit	100

krad(Si)	3	0	10	30	50	100
LL	100.000	100.000	100.000	100.000	100.000	100.000
Min	857.855	855.298	843.338	868.614	871.839	881.408
Average	862.975	858.083	860.579	872.321	875.697	884.216
Max	869.759	863.230	867.037	876.223	879.769	890.163
UL	1000.000	1000.000	1000.000	1000.000	1000.000	1000.000



TID Unbiased HDR Report

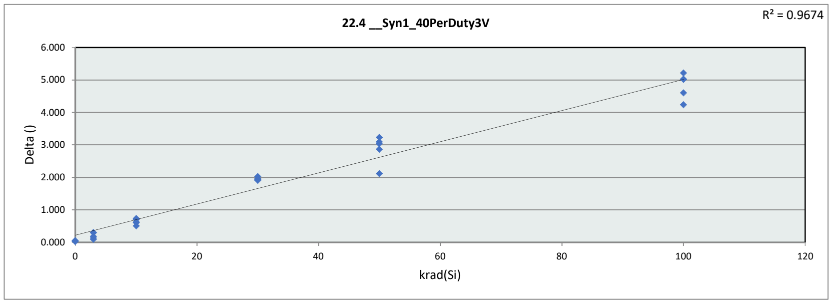
Die lot: 1087518

Assy Lot: 2517212

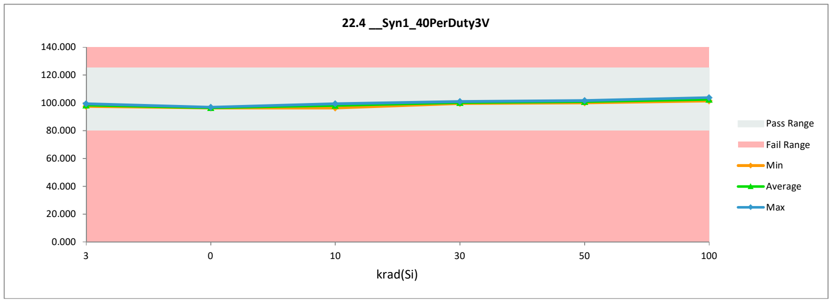
Exposure date: 11/15/2022

TPS7H4001-SHP

		22.4 __Syn1_40PerDuty3V		
	Test Site	unkins Lab - Dalla	unkins Lab - Dallas	
	Tester	TS364 - FETS3641	TS364 - FETS36412	
	Test Number	EB588003	EB588003	
	Unit			
	Max Limit	125	125	
	Min Limit	80	80	
krad(Si)	Serial #	Pre_Unbiased	Post_unbiased	Delta
100	27	98.574	103.783	5.209
100	28	97.473	102.490	5.017
100	29	97.985	103.012	5.027
100	30	97.336	101.571	4.235
100	31	96.717	101.316	4.599
50	41	99.162	101.284	2.122
50	42	98.648	101.513	2.865
50	43	97.647	100.679	3.032
50	44	98.067	101.294	3.227
50	45	96.990	100.084	3.094
30	51	98.486	100.417	1.931
30	52	98.578	100.524	1.946
30	53	98.885	100.845	1.960
30	54	97.669	99.583	1.914
30	55	98.303	100.328	2.025
10	61	97.333	97.839	0.506
10	62	97.785	98.496	0.711
10	63	95.589	96.218	0.629
10	64	98.656	99.391	0.735
10	65	98.715	99.328	0.613
3	71	97.485	97.623	0.138
3	72	98.279	98.585	0.306
3	73	99.248	99.428	0.180
3	74	98.896	99.198	0.302
3	75	97.363	97.454	0.091
0	33	96.834	96.887	0.053
0	34	96.197	96.224	0.027
0	35	96.569	96.612	0.043
	Max	99.248	103.783	5.209
	Average	97.838	99.715	1.876
	Min	95.589	96.218	0.027
	Std Dev	0.932	2.033	1.737



	22.4 __Syn1_40PerDuty3V					
Test Site	unkins Lab - Dallas					
Tester	TS364 - FETS36412					
Test Number	EB588003					
Max Limit	125					
Min Limit	80					
krad(Si)	3	0	10	30	50	100
LL	80.000	80.000	80.000	80.000	80.000	80.000
Min	97.454	96.224	96.218	99.583	100.084	101.316
Average	98.458	96.574	98.254	100.339	100.971	102.434
Max	99.428	96.887	99.391	100.845	101.513	103.783
UL	125.000	125.000	125.000	125.000	125.000	125.000



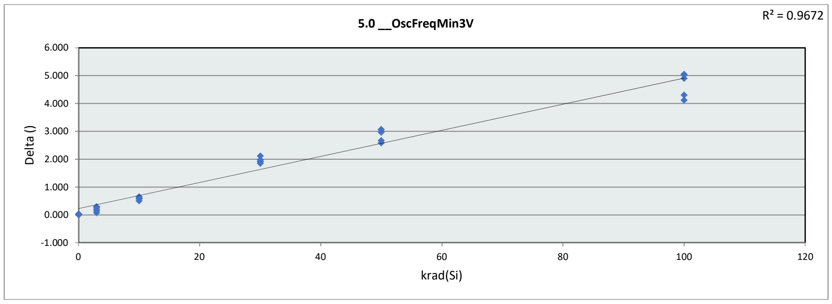
TID Unbiased HDR Report

Die lot: 1087518
Assy Lot: 2517212

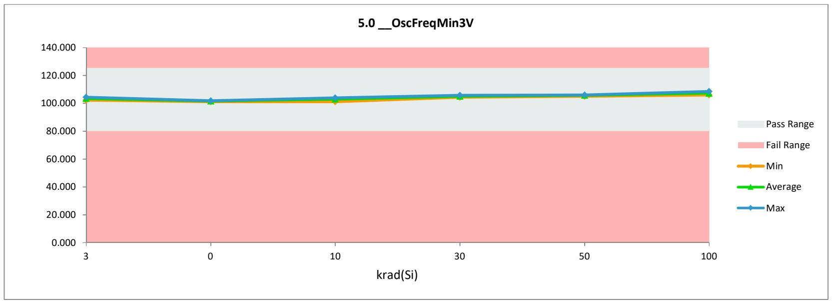
Exposure date: 11/15/2022

TPS7H4001-SHP

		5.0 __OscFreqMin3V		
	Test Site	unkins Lab - Dalla	unkins Lab - Dallas	
	Tester	TS364 - FETS3641	TS364 - FETS36412	
	Test Number	EB588003	EB588003	
	Unit			
	Max Limit	125	125	
	Min Limit	80	80	
krad(Si)	Serial #	Pre_Unbiased	Post_unbiased	Delta
100	27	103.439	108.483	5.044
100	28	102.452	107.353	4.901
100	29	102.931	107.955	5.024
100	30	102.280	106.398	4.118
100	31	101.710	106.012	4.302
50	41	103.420	106.000	2.580
50	42	103.388	106.051	2.663
50	43	102.635	105.598	2.963
50	44	102.997	105.996	2.999
50	45	101.972	105.035	3.063
30	51	102.875	104.992	2.117
30	52	103.496	105.400	1.904
30	53	103.780	105.758	1.978
30	54	102.638	104.488	1.850
30	55	103.073	104.989	1.916
10	61	102.333	102.832	0.499
10	62	102.791	103.368	0.577
10	63	100.545	101.197	0.652
10	64	103.416	104.010	0.594
10	65	103.408	104.016	0.608
3	71	102.477	102.621	0.144
3	72	103.217	103.516	0.299
3	73	104.171	104.375	0.204
3	74	103.789	104.066	0.277
3	75	102.336	102.418	0.082
0	33	101.829	101.857	0.028
0	34	101.141	101.140	-0.001
0	35	101.570	101.598	0.028
	Max	104.171	108.483	5.044
	Average	102.718	104.554	1.836
	Min	100.545	101.140	-0.001
	Std Dev	0.849	1.964	1.697



	5.0 __OscFreqMin3V					
Test Site	unkins Lab - Dallas					
Tester	TS364 - FETS36412					
Test Number	EB588003					
Max Limit	125					
Min Limit	80					
krad(Si)	3	0	10	30	50	100
LL	80.000	80.000	80.000	80.000	80.000	80.000
Min	102.418	101.140	101.197	104.488	105.035	106.012
Average	103.399	101.532	103.085	105.125	105.736	107.240
Max	104.375	101.857	104.016	105.758	106.051	108.483
UL	125.000	125.000	125.000	125.000	125.000	125.000



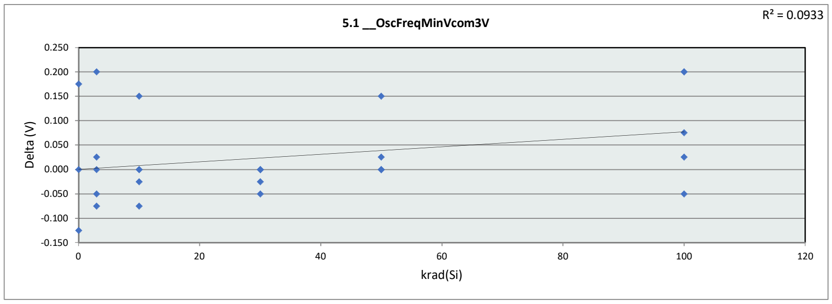
TID Unbiased HDR Report

Die lot: 1087518
Assy Lot: 2517212

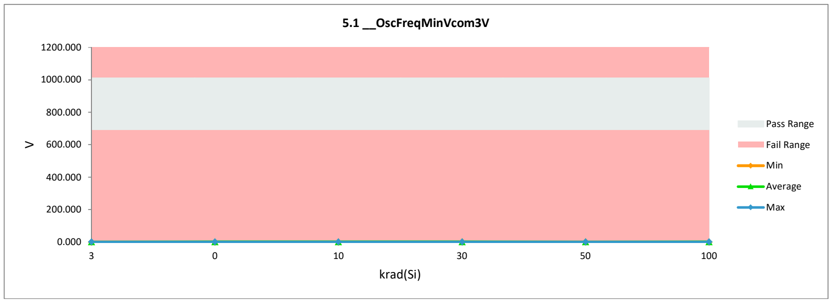
Exposure date: 11/15/2022

TPS7H4001-SHP

		5.1 __OscFreqMinVcom3V		
	Test Site	unkins Lab - Dalla	unkins Lab - Dallas	
	Tester	TS364 - FETS3641	TS364 - FETS36412	
	Test Number	EB588003	EB588003	
	Unit	V	V	
	Max Limit	1011	1011	
	Min Limit	689	689	
krad(Si)	Serial #	Pre_Unbiased	Post_unbiased	Delta
100	27	0.375	0.575	0.200
100	28	0.375	0.400	0.025
100	29	0.350	0.300	-0.050
100	30	0.375	0.450	0.075
100	31	0.375	0.575	0.200
50	41	0.575	0.575	0.000
50	42	0.575	0.575	0.000
50	43	0.375	0.375	0.000
50	44	0.400	0.550	0.150
50	45	0.375	0.400	0.025
30	51	0.575	0.550	-0.025
30	52	0.425	0.375	-0.050
30	53	0.375	0.375	0.000
30	54	0.375	0.375	0.000
30	55	0.575	0.575	0.000
10	61	0.350	0.325	-0.025
10	62	0.200	0.350	0.150
10	63	0.425	0.350	-0.075
10	64	0.575	0.575	0.000
10	65	0.575	0.575	0.000
3	71	0.450	0.400	-0.050
3	72	0.375	0.375	0.000
3	73	0.375	0.300	-0.075
3	74	0.350	0.375	0.025
3	75	0.175	0.375	0.200
0	33	0.475	0.350	-0.125
0	34	0.400	0.575	0.175
0	35	0.350	0.350	0.000
	Max	0.575	0.575	0.200
	Average	0.412	0.439	0.027
	Min	0.175	0.300	-0.125
	Std Dev	0.105	0.104	0.090



	5.1 __OscFreqMinVcom3V					
Test Site	unkins Lab - Dallas					
Tester	S364 - FETS36412					
Test Number	EB588003					
Max Limit	1011	V				
Min Limit	689	V				
krad(Si)	3	0	10	30	50	100
LL	689.000	689.000	689.000	689.000	689.000	689.000
Min	0.300	0.350	0.325	0.375	0.375	0.300
Average	0.365	0.425	0.435	0.450	0.495	0.460
Max	0.400	0.575	0.575	0.575	0.575	0.575
UL	1011.000	1011.000	1011.000	1011.000	1011.000	1011.000



TID Unbiased HDR Report

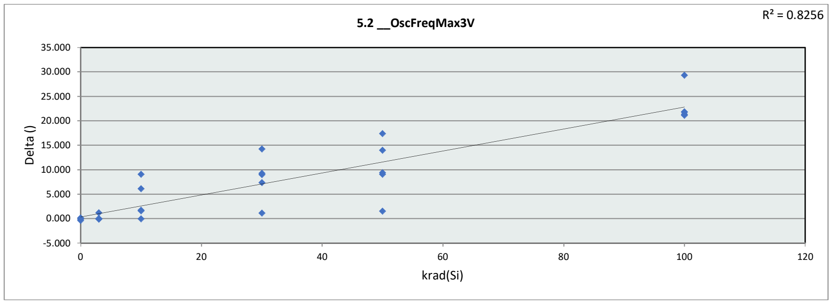
Die lot: 1087518
Assy Lot: 2517212

Exposure date: 11/15/2022

TPS7H4001-SHP

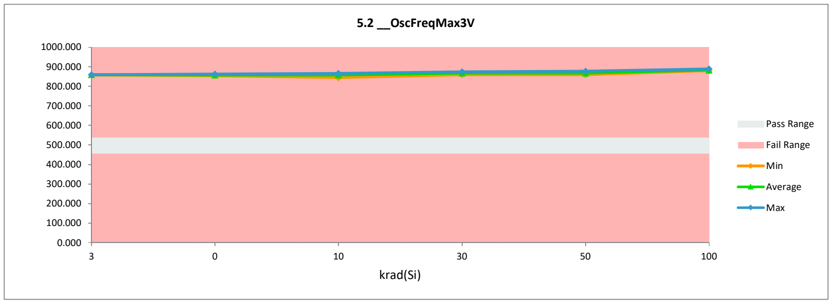
	5.2 __OscFreqMax3V	
Test Site	unkins Lab - Dalla	unkins Lab - Dallas
Tester	TS364 - FETS3641	TS364 - FETS36412
Test Number	EB588003	EB588003
Unit		
Max Limit	535	535
Min Limit	455	455

krad(Si)	Serial #	Pre_Unbiased	Post_unbiased	Delta
100	27	859.684	888.979	29.295
100	28	859.473	880.580	21.107
100	29	859.329	881.151	21.822
100	30	859.610	881.370	21.760
100	31	862.156	883.448	21.292
50	41	859.612	876.971	17.359
50	42	859.592	868.980	9.388
50	43	850.567	859.621	9.054
50	44	859.584	873.592	14.008
50	45	858.057	859.593	1.536
30	51	858.492	859.607	1.115
30	52	859.602	868.627	9.025
30	53	859.601	873.872	14.271
30	54	859.670	868.961	9.291
30	55	861.537	868.925	7.388
10	61	859.634	859.575	-0.059
10	62	858.006	859.597	1.591
10	63	841.836	843.569	1.733
10	64	859.607	865.707	6.100
10	65	850.567	859.624	9.057
3	71	857.642	857.520	-0.122
3	72	856.560	857.745	1.185
3	73	859.643	859.626	-0.017
3	74	859.601	859.574	-0.027
3	75	859.602	859.644	0.042
0	33	853.916	853.832	-0.084
0	34	862.264	862.402	0.138
0	35	855.352	855.005	-0.347
	Max	862.264	888.979	29.295
	Average	857.886	865.989	8.104
	Min	841.836	843.569	-0.347
	Std Dev	4.232	10.675	8.802



	5.2 __OscFreqMax3V
Test Site	unkins Lab - Dallas
Tester	TS364 - FETS36412
Test Number	EB588003
Max Limit	535
Min Limit	455

krad(Si)	3	0	10	30	50	100
LL	455.000	455.000	455.000	455.000	455.000	455.000
Min	857.520	853.832	843.569	859.607	859.593	880.580
Average	858.822	857.080	857.614	867.998	867.751	883.106
Max	859.644	862.402	865.707	873.872	876.971	888.979
UL	535.000	535.000	535.000	535.000	535.000	535.000



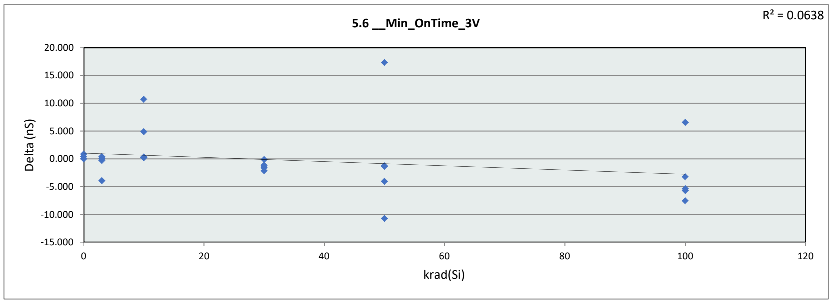
TID Unbiased HDR Report

Die lot: 1087518
Assy Lot: 2517212

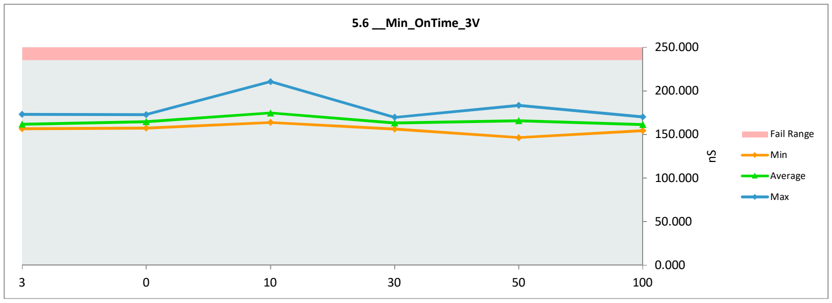
Exposure date: 11/15/2022

TPS7H4001-SHP

		5.6 __Min_OnTime_3V		
	Test Site	unkins Lab - Dalla	unkins Lab - Dallas	
	Tester	TS364 - FETS3641	TS364 - FETS36412	
	Test Number	EB588003	EB588003	
	Unit	nS	nS	
	Max Limit	235	235	
	Min Limit			
krad(Si)	Serial #	Pre_Unbiased	Post_unbiased	Delta
100	27	166.722	163.502	-3.220
100	28	167.065	161.364	-5.701
100	29	162.966	157.636	-5.330
100	30	161.893	154.328	-7.565
100	31	163.536	170.113	6.577
50	41	166.607	165.265	-1.342
50	42	157.196	146.506	-10.690
50	43	168.389	167.118	-1.271
50	44	165.915	183.230	17.315
50	45	170.803	166.772	-4.031
30	51	167.436	167.295	-0.141
30	52	161.424	159.925	-1.499
30	53	164.523	163.350	-1.173
30	54	157.714	156.081	-1.633
30	55	171.832	169.675	-2.157
10	61	205.720	210.602	4.882
10	62	163.560	163.891	0.331
10	63	164.898	165.145	0.247
10	64	159.282	169.984	10.702
10	65	163.562	163.803	0.241
3	71	160.278	159.967	-0.311
3	72	173.030	173.009	-0.021
3	73	160.622	156.705	-3.917
3	74	157.631	157.728	0.097
3	75	161.086	161.463	0.377
0	33	162.956	163.377	0.421
0	34	156.600	157.470	0.870
0	35	172.785	172.804	0.019
	Max	205.720	210.602	17.315
	Average	165.573	165.290	-0.283
	Min	156.600	146.506	-10.690
	Std Dev	9.125	11.346	5.338



5.6 __Min_OnTime_3V						
Test Site	unkins Lab - Dallas					
Tester	TS364 - FETS36412					
Test Number	EB588003					
Max Limit	235	nS				
Min Limit		nS				
krad(Si)	3	0	10	30	50	100
LL						
Min	156.705	157.470	163.803	156.081	146.506	154.328
Average	161.774	164.550	174.685	163.265	165.778	161.389
Max	173.009	172.804	210.602	169.675	183.230	170.113
UL	235.000	235.000	235.000	235.000	235.000	235.000



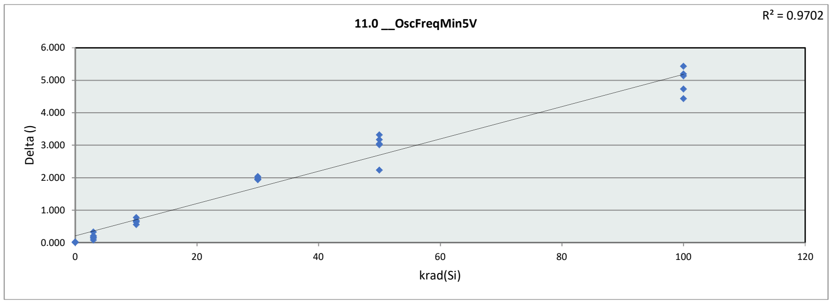
TID Unbiased HDR Report

Die lot: 1087518
Assy Lot: 2517212

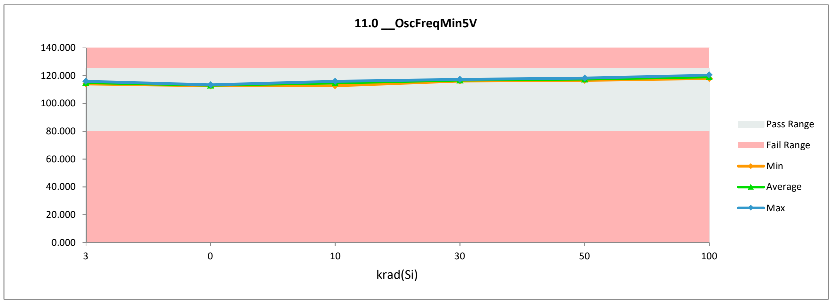
Exposure date: 11/15/2022

TPS7H4001-SHP

		11.0 __OscFreqMin5V		
	Test Site	unkins Lab - Dalla	unkins Lab - Dallas	
	Tester	TS364 - FETS3641	TS364 - FETS36412	
	Test Number	EB588003	EB588003	
	Unit			
	Max Limit	125	125	
	Min Limit	80	80	
krad(Si)	Serial #	Pre_Unbiased	Post_unbiased	Delta
100	27	114.988	120.418	5.430
100	28	113.872	119.004	5.132
100	29	114.450	119.640	5.190
100	30	113.799	118.231	4.432
100	31	113.179	117.906	4.727
50	41	115.592	117.824	2.232
50	42	115.100	118.113	3.013
50	43	114.109	117.152	3.043
50	44	114.591	117.915	3.324
50	45	113.479	116.654	3.175
30	51	114.914	116.869	1.955
30	52	114.989	116.943	1.954
30	53	115.346	117.347	2.001
30	54	114.117	116.056	1.939
30	55	114.796	116.831	2.035
10	61	113.821	114.376	0.555
10	62	114.307	114.988	0.681
10	63	112.023	112.686	0.663
10	64	115.072	115.848	0.776
10	65	115.011	115.648	0.637
3	71	113.872	114.012	0.140
3	72	114.816	114.992	0.176
3	73	115.661	115.871	0.210
3	74	115.165	115.499	0.334
3	75	113.871	113.958	0.087
0	33	113.330	113.351	0.021
0	34	112.655	112.682	0.027
0	35	112.975	112.982	0.007
	Max	115.661	120.418	5.430
	Average	114.282	116.207	1.925
	Min	112.023	112.682	0.007
	Std Dev	0.916	2.090	1.800



	11.0 __OscFreqMin5V					
Test Site	unkins Lab - Dallas					
Tester	TS364 - FETS36412					
Test Number	EB588003					
Max Limit	125					
Min Limit	80					
krad(Si)	3	0	10	30	50	100
LL	80.000	80.000	80.000	80.000	80.000	80.000
Min	113.958	112.682	112.686	116.056	116.654	117.906
Average	114.866	113.005	114.709	116.809	117.532	119.040
Max	115.871	113.351	115.848	117.347	118.113	120.418
UL	125.000	125.000	125.000	125.000	125.000	125.000



TID Unbiased HDR Report

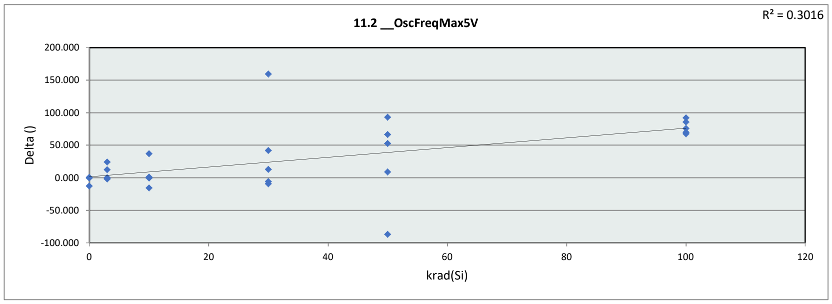
Die lot: 1087518
Assy Lot: 2517212

Exposure date: 11/15/2022

TPS7H4001-SHP

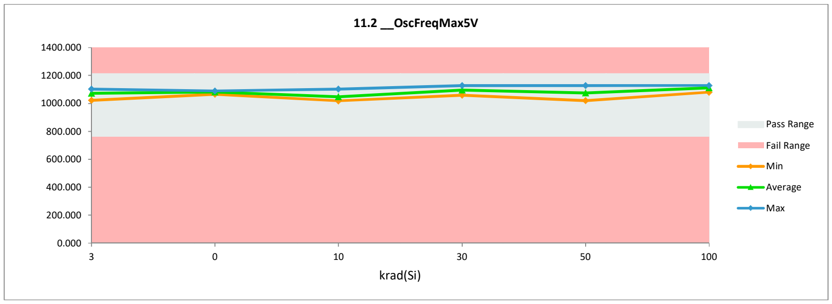
	11.2 __OscFreqMax5V	
Test Site	unkins Lab - Dalla	unkins Lab - Dallas
Tester	TS364 - FETS3641	TS364 - FETS36412
Test Number	EB588003	EB588003
Unit		
Max Limit	1212	1212
Min Limit	760	760

krad(Si)	Serial #	Pre_Unbiased	Post_unbiased	Delta
100	27	1036.216	1128.069	91.853
100	28	1041.431	1111.088	69.657
100	29	1012.255	1079.634	67.379
100	30	1038.884	1114.662	75.778
100	31	1038.841	1124.456	85.615
50	41	1106.151	1019.506	-86.645
50	42	1034.829	1101.268	66.439
50	43	1056.110	1064.871	8.761
50	44	1008.972	1061.738	52.766
50	45	1034.319	1127.437	93.118
30	51	1101.625	1095.853	-5.772
30	52	1101.785	1114.782	12.997
30	53	1034.939	1077.023	42.084
30	54	968.533	1128.042	159.509
30	55	1068.776	1059.739	-9.037
10	61	1036.000	1036.144	0.144
10	62	1033.288	1034.458	1.170
10	63	1018.101	1017.808	-0.293
10	64	1061.679	1046.000	-15.679
10	65	1064.817	1101.810	36.993
3	71	1101.843	1101.905	0.062
3	72	1040.332	1039.319	-1.013
3	73	1077.763	1101.778	24.015
3	74	1089.271	1101.815	12.544
3	75	1022.763	1020.887	-1.876
0	33	1064.142	1064.940	0.798
0	34	1101.817	1089.355	-12.462
0	35	1088.658	1088.459	-0.199
	Max	1106.151	1128.069	159.509
	Average	1053.005	1080.459	27.454
	Min	968.533	1017.808	-86.645
	Std Dev	34.243	35.499	48.404



	11.2 __OscFreqMax5V
Test Site	unkins Lab - Dallas
Tester	TS364 - FETS36412
Test Number	EB588003
Max Limit	1212
Min Limit	760

krad(Si)	3	0	10	30	50	100
LL	760.000	760.000	760.000	760.000	760.000	760.000
Min	1020.887	1064.940	1017.808	1059.739	1019.506	1079.634
Average	1073.141	1080.918	1047.244	1095.088	1074.964	1111.582
Max	1101.905	1089.355	1101.810	1128.042	1127.437	1128.069
UL	1212.000	1212.000	1212.000	1212.000	1212.000	1212.000



TID Unbiased HDR Report

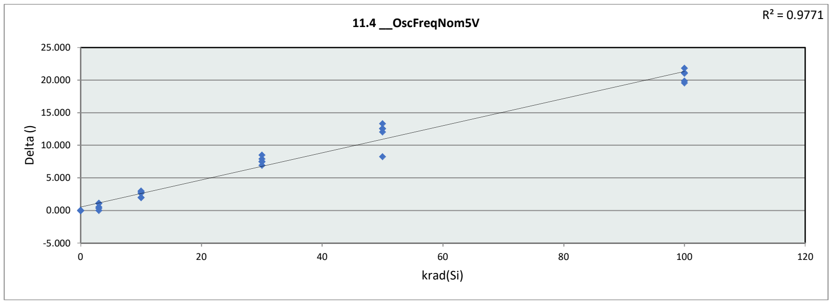
Die lot: 1087518
Assy Lot: 2517212

Exposure date: 11/15/2022

TPS7H4001-SHP

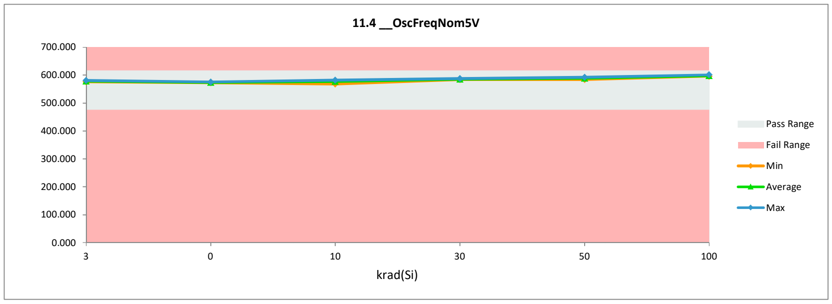
	11.4 __OscFreqNom5V		
Test Site	unkins Lab - Dalla	unkins Lab - Dallas	
Tester	TS364 - FETS3641	TS364 - FETS36412	
Test Number	EB588003	EB588003	
Unit			
Max Limit	615	615	
Min Limit	475	475	

krad(Si)	Serial #	Pre_Unbiased	Post_unbiased	Delta
100	27	580.231	601.368	21.137
100	28	575.944	596.981	21.037
100	29	576.221	598.020	21.799
100	30	577.716	597.575	19.859
100	31	576.530	596.102	19.572
50	41	577.668	590.978	13.310
50	42	580.139	592.163	12.024
50	43	575.438	588.026	12.588
50	44	576.326	584.565	8.239
50	45	574.351	586.899	12.548
30	51	577.654	584.569	6.915
30	52	578.206	585.660	7.454
30	53	580.050	587.571	7.521
30	54	578.616	587.120	8.504
30	55	577.756	585.669	7.913
10	61	575.719	577.693	1.974
10	62	575.471	578.299	2.828
10	63	565.546	568.208	2.662
10	64	579.419	582.400	2.981
10	65	577.770	579.782	2.012
3	71	576.022	576.357	0.335
3	72	575.958	577.012	1.054
3	73	580.640	581.200	0.560
3	74	578.039	579.180	1.141
3	75	577.683	577.689	0.006
0	33	573.273	573.254	-0.019
0	34	575.664	575.633	-0.031
0	35	572.744	572.766	0.022
	Max	580.640	601.368	21.799
	Average	576.671	584.384	7.712
	Min	565.546	568.208	-0.031
	Std Dev	2.961	8.593	7.483



	11.4 __OscFreqNom5V
Test Site	unkins Lab - Dallas
Tester	TS364 - FETS36412
Test Number	EB588003
Max Limit	615
Min Limit	475

krad(Si)	3	0	10	30	50	100
LL	475.000	475.000	475.000	475.000	475.000	475.000
Min	576.357	572.766	568.208	584.569	584.565	596.102
Average	578.288	573.884	577.276	586.118	588.526	598.009
Max	581.200	575.633	582.400	587.571	592.163	601.368
UL	615.000	615.000	615.000	615.000	615.000	615.000



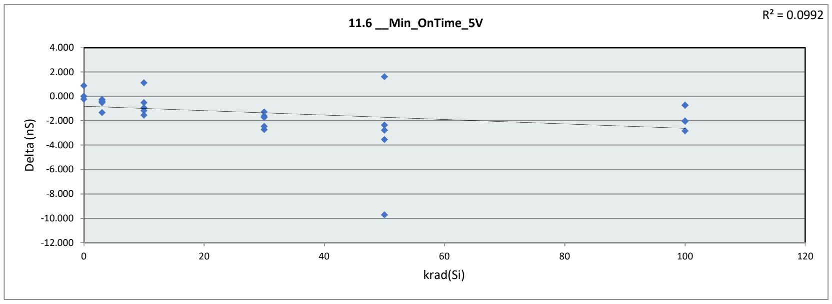
TID Unbiased HDR Report

Die lot: 1087518
Assy Lot: 2517212

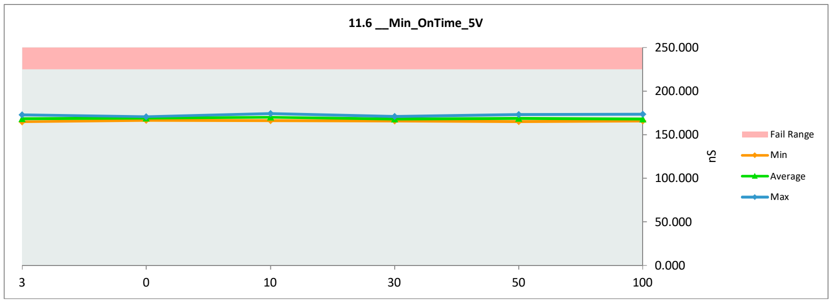
Exposure date: 11/15/2022

TPS7H4001-SHP

		11.6 __Min_OnTime_5V		
	Test Site	unkins Lab - Dalla	unkins Lab - Dallas	
	Tester	TS364 - FETS3641	TS364 - FETS36412	
	Test Number	EB588003	EB588003	
	Unit	nS	nS	
	Max Limit	225	225	
	Min Limit			
krad(Si)	Serial #	Pre_Unbiased	Post_unbiased	Delta
100	27	169.243	167.207	-2.036
100	28	167.199	166.478	-0.721
100	29	168.753	165.927	-2.826
100	30	168.460	166.441	-2.019
100	31	174.352	173.632	-0.720
50	41	174.112	171.750	-2.362
50	42	174.749	165.025	-9.724
50	43	169.861	166.317	-3.544
50	44	171.555	173.173	1.618
50	45	169.662	166.886	-2.776
30	51	172.358	171.069	-1.289
30	52	169.038	167.417	-1.621
30	53	168.355	165.879	-2.476
30	54	167.769	166.050	-1.719
30	55	172.063	169.342	-2.721
10	61	173.155	174.276	1.121
10	62	169.219	168.291	-0.928
10	63	173.528	173.021	-0.507
10	64	167.827	166.289	-1.538
10	65	169.834	168.650	-1.184
3	71	166.525	166.109	-0.416
3	72	173.178	172.933	-0.245
3	73	169.904	168.572	-1.332
3	74	165.262	164.755	-0.507
3	75	170.182	169.796	-0.386
0	33	170.870	170.629	-0.241
0	34	165.620	166.492	0.872
0	35	170.182	170.179	-0.003
	Max	174.749	174.276	1.618
	Average	170.101	168.664	-1.437
	Min	165.262	164.755	-9.724
	Std Dev	2.609	2.897	2.042



	11.6 __Min_OnTime_5V					
Test Site	unkins Lab - Dallas					
Tester	S364 - FETS36412					
Test Number	EB588003					
Max Limit	225	nS				
Min Limit		nS				
krad(Si)	3	0	10	30	50	100
LL						
Min	164.755	166.492	166.289	165.879	165.025	165.927
Average	168.433	169.100	170.105	167.951	168.630	167.937
Max	172.933	170.629	174.276	171.069	173.173	173.632
UL	225.000	225.000	225.000	225.000	225.000	225.000



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